Central Internet Database Report Requirements

Version 4.0

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U.S. Department of Energy

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1.0 Overview

1.1 Purpose

This document describes the specific requirements for the reporting capabilities of the Central Internet Database (CID). The intent of this document is to present the pre-designed reports that will be available from the CID and provide software developers detailed specifications for the content, format, and computations required to produce those reports. The CID will also provide a feature for users to develop ad hoc queries. Since ad hoc queries are exclusively designed by the user, no developer specification is necessary. The technical details for the ad hoc query feature are presented in the CID design documentation.

1.2 Scope

The reporting requirements are based on the ***Central Internet Database Requirements, Version 4.0***, which describes the logical database model for the CID and presents functional capabilities of the CID web software. The physical model, presented in Appendix A, depicts the physical structure of the database. This model was used as a reference for the report specifications in this document.

Three types of reporting capabilities are available through the CID web site:

- **Ready to Read Reports.** This report type includes "pre-generated" outputs, available in Portable Document Format (PDF), that summarize the CID data throughout the DOE complex.

- **Standard Reports.** This report type includes reports that are in a standard format, but enable the user to tailor the output through filtering to include or exclude particular records from the report format.

- **User-Defined Reports**. This report type enables the user to construct the content and format of a report from scratch by specifying data sets to be included, identifying columns of data to be included, and applying detailed filters and sorts. User-defined reports enable "ad-hoc" querying and reporting of the information contained in the CID.

The following topics are addressed in this document:

- Background and purpose of the CID project;
- Description of the technical reporting capabilities
- Description of the type of reports supported in the CID
- Detailed report specifications, including sample formats
- Discussion of outstanding issues for CID report development

The ***Central Internet Database Requirements, Version 4.0*** and the ***Central Internet Database Report Specification, Version 4.0*** (this document), represent the core functionality of Version 1.0 of the CID software. CID Version 1.0 has undergone three complete releases (Release 1, 2, and 3), with the third release taking place on March 31, 2000. This document has been updated (from its last release on

December 3, 1999) to reflect decisions that have been made during the phased implementation of the CID Version 1.0.

1.3 Background on Central Internet Database

In June 1989, the Natural Resources Defense Council, Inc. (NRDC) and other organizations filed suit against then DOE Secretary James Watkins over the Department's failure to prepare a Programmatic Environmental Impact Statement (PEIS) regarding its environmental management and weapons modernization activities. In October 1990, a settlement was reached that called for the development of two PEISs: one covering the nuclear weapons complex's future configuration and the other covering the Environmental Restoration and Waste Management (ER/WM) Program.

In 1995, DOE modified the scope of the ER/WM PEIS to exclude environmental restoration activities. In 1997, the NRDC, acting on behalf of itself and 38 non-governmental groups, filed suit against DOE and several DOE officials. The suit alleged that DOE had violated the 1990 consent order by failing to prepare a PEIS for the Department's ER/WM Program, and that this inaction constituted a contempt of court. On December 12, 1998, DOE and NRDC reconciled the suit through an official settlement agreement.

The PEIS Settlement Agreement reached by NRDC and DOE avoided further litigation by mandating that DOE take defined actions to enhance public understanding of the multi-billion dollar cleanup of its nuclear weapons complex. One of the DOE actions specified in the agreement is the development and deployment of a database that integrates existing information on Departmental waste, facilities, and contaminated media. It was mandated that the database be made available to the public via the Internet through a web-based reporting tool which provides the capability to generate standard reports and perform searches and queries.

2.0 Technical Approach

2.1 Discussion of Reporting Capabilities

CID reporting capabilities require a flexible user interface to enable users to access data, generate reports, tailor standard reports through selection criteria, and develop ad hoc queries. In recent years, many large databases have been made available to the public through the Internet, with web user interface software enabling query development, report formatting, and output file format selection. As a result, several commercial-off-the-shelf (COTS) software tools are available to assist developers in producing a web interface to support query and reporting capabilities. Depending upon the complexity of the database and the desired query and reporting capabilities, custom-developed interfaces are also employed for systems like the CID.

2.2 COTS Tools

Prior to making a decision on the development platform, the CID Project Team evaluated the following COTS tools for CID web interface development:

- Actuate e.Reporting Suite
- Business Objects WebIntelligence
- Cognos Impromptu
- Information Advantage IQ/Objects, IQ/Server
- Informix Dynamic Server
- Jinfonet Software JReport
- Mineshare Mineshare Suite
- Oracle WebDB
- SAS Institute SAS
- Seagate Software Crystal Reports

The specific features examined for each tool were:

- cost
- need for client plug-ins and/or Java
- enabled clients (browsers)
- ease of use
- ability to customize
- ability to integrate with user applications (API and parameter driven interface),
- learning curve
- complexity of use
- product maturity

2.3 Custom Development

In addition to evaluating COTS options, the CID Project Team considered a custom-developed user interface for the CID. A custom-developed user interface was a viable option for the CID, given the complexity of the database and the DOE-specific nature of the required outputs. The COTS options lacked fundamental qualities to support the CID, or required excessive customization to meet the needs of the user community.

After extensive evaluation of development options, the project team decided to custom-build the user interface application using web application development software, but they opted to use a COTS tool to assist with the development of CID Summary and Standard reports. Ultimately, the project team built the CID interface using Cold Fusion (Version 4.01) and Microsoft IIS (Version 4.0), with Seagate Crystal Reports Software tool (Version 7.0) for CID reports. This development approach provides users with a non-technical interface to support criteria selection, generate standard reports, and develop ad-hoc queries.

3.0 Types of CID Reports

The Central Internet Database contains a complex set of data from several different national databases maintained by DOE. To accommodate a variety of technical skills in the user community, the CID web site offers three types of reports: Ready to Read Reports, Standard Reports, and User Defined Reports. Appendix B presents a list of the standard and ready-to-read reports in each of the categories described below. This list depicts how the report options are presented to the user on the Central Internet Database web site.

3.1 Ready-to-Read Reports

Ready-to-Read reports are "pre-generated" outputs, available in Portable Document Format (PDF), that represent high-level aggregated data on DOE waste and waste management activities across the DOE complex. Also included in the ready-to-read reports are "profiles" of DOE waste data. The profile reports combine data from all the other data categories to produce site-wide, DOE program-wide, state-wide, and year-wide summary profiles. Profiles contain summary information on radioactive waste, contaminated media, spent nuclear fuel, facilities, non-radioactive hazardous waste and sanitary waste, toxic release inventory data, and materials in inventory. *Buried transuranic waste (TRU) information will also be available in the summary reports once data are finalized and incorporated into the CID database.* Profile reports are available for each DOE site managing program and for each state where DOE has active waste management sites. An annual profile for the most current data reporting year is also included.

3.2 Standard Reports

Standard reports are pre-defined, pre-formatted outputs that provide more detailed information on DOE waste and waste management activities within particular DOE programs, operations offices, states, or sites. The user can tailor the output by selecting desired categories of information through "selection criteria" screens. Selection criteria are filtered to include only the valid options (options with available data) based on previous selections for the report. This process allows a report to include or exclude particular records from the output based on the topic or area of interest and eliminates the possibility of generating a report where no data is returned.

Over 50 standard report options are available in Version 1.0 of the CID. Each report option has a set of selection criteria to enable the user to narrow or broaden the information presented in the output to the desired level of detail. The detailed specifications for these reports, by category, are presented in Section 4.X.

3.2.1 Standard Report Organization in the CID

Because stakeholders are likely to be less familiar with the actual data sources used to populate the Central Internet Database (e.g., EM Corporate Database, Facilities Information Management System), standard reports have been organized around "data categories". Many of these data categories are specifically requested in the PEIS Settlement Agreement (e.g., contaminated facilities, radioactive waste, contaminated media) while others are a combination of two or more data categories (combined radioactive waste and contaminated media). There are nine categories of data that represent how the standard reports will be organized:

- Radioactive Waste. Reports for this category contain data on the major radioactive waste types (e.g., high level waste, transuranic waste, low level waste). *This category will also include buried transuranic waste (TRU) information once the data are finalized and incorporated into the CID database.* Reports range in detail from individual waste streams to site-wide summaries and include such topics as waste transfers (i.e. shipping and receiving), waste generation, and waste management activities.

- Contaminated Media. Contaminated media refers to materials such as soil, sediment, surface water, groundwater, and others (e.g., sludge and rubble/debris that have been disposed of and/or are intermixed with soil). Reports for this data category also range in detail from individual waste stream levels to site-wide levels and include such topics as contaminated media stream profiles, waste transfers, and contaminated media material balances.

- Combined Radioactive Waste and Contaminated Media. The reports in this category incorporate both radioactive waste and contaminated media data into single reports. These combined reports are very similar to the individual radioactive waste and contaminated media reports and include many of the same topics.

- Spent Nuclear Fuel. Spent nuclear fuel refers to fuel that has been permanently withdrawn from a nuclear reactor following irradiation, but has not been processed to remove its constituent elements. Major topics for this category of reports are also similar to the individual radioactive waste and contaminated media reports and include waste transfers, management activities, and material balances.

- Facilities. Facilities are buildings, other structures and facilities, and trailers, modulars or containers that are either owned or leased by the Department of Energy. Reports for facilities include a detailed site report, a summary site report, and a report on facility contamination types.

- Non-Radioactive Waste. This category includes both non-radioactive hazardous waste and sanitary waste. Non-radioactive hazardous waste refers to any solid waste or combination of solid wastes that do not contain radionuclides of any type and, because of is quantity, concentration, or physical, chemical, or infectious characteristics may: (1) cause or significantly contribute to an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or (2) pose a substantial threat or potential hazard to the environment when improperly treated, stored, transported, or disposed of, or otherwise managed. Sanitary waste refers to waste, such as garbage, that is generated by normal housekeeping activities and is not classified as either hazardous or radioactive. Reports for this data category include a site-wide non-radioactive hazardous waste report and an site-wide sanitary waste report.

- Toxic Chemical Release Inventory (TRI). This category includes reports that present TRI data reported by DOE sites. TRI reports include information on DOE site releases of those chemicals listed by the Environmental Protection Agency under Section 313 of the Emergency Planning and Community Right-to-Know Act. The current TRI list contains 579 individually listed chemicals and 28 chemical categories. Reports provide data profiling individual DOE reporting sites and reporting years.

- Materials In Inventory. The Materials in Inventory (MIN) reports provide data collected for the 1996 DOE report entitled *Taking Stock: A Look at the Opportunities and Challenges Posed by*

Inventories from the Cold War Era. In the 1996 report, materials in inventory (MIN) is defined as those materials that were not currently in use (i.e., had not been used during the last year and are not reasonably expected to be used within the coming year), had not been designated as waste, and had not been set aside by the Department for national defense purposes. MIN Data category reports are organized around individual sites and MIN categories.

- Formerly Utilized Sites Remedial Action Program(FUSRAP) and Nuclear Waste Policy Act (NWPA) 151(b) Sites. Currently, there are no reports for this data category. DOE is actively investigating national-level data sources to provide information to the CID. In addition, many of the FUSRAP and NWPA sites are currently not managed by DOE, and the data available are mainly historical.

3.2.2 Report Sub-Categories

The radioactive waste, contaminated media, and combined radioactive waste and contaminated media reports are further categorized as follows:

- Annual and Projected Waste/Material Volumes
- Waste/Material Characteristics Data
- Shipping and Receiving Volumes
- Treatment, Storage, and Disposal (TSD) Systems (this category is only available for the combined contaminated media and radioactive waste category)

The categories and sub-categories are used on the web site to enable users to narrow down report selections by selecting their areas of interest.

4.0 Report Specifications

This section details the report specifications for the standard and ready to read reports that are available in the Central Internet Database.

4.1 Report Specification Overview

4.1.1 Specification Sheets and Report Formats

For each standard or summary report, a specification sheet is provided in Section 4.2 that presents:

Number and Name of Report: This is the report identifier and the official title of the output. If more than 1 report uses the same format, the alphanumeric code and title of each report using the format is presented.

Report Category/Subcategory: Identifies the high-level category of the report (e.g. Radioactive Waste), and the sub-category, where applicable (e.g. Waste/Material Characteristic Data)

Description: Provides a general description of the content and format of the report.

Applicable Records: Describes the specific records to be included in the report output. If multiple reports use the same format, each record set is described separately.

Applicable Tables: Presents the names of the tables from the CID physical data model that will be used for this report.

Special Calculations/Formatting: Describes specific business rules to be used when constructing the query for the report and preparing the report format. If multiple reports use the same format but require computations unique to that report, these guidelines are listed separately within this section.

Record Selection: Describes what specific selection criteria are available for the report, the order in which the selection should appear, and any special rules governing record selection screen functionality.

Sorting/Grouping: Describes how the record set will be sorted when preparing the report output, and how records should be grouped when presenting report details.

In addition, a sample format for each report was developed that shows the presents how the completed report will look. Appendix C of this document contains the sample formats for each standard and summary report; the reports appear in Appendix C in the order that they are described in Section 4.2 of this document.

4.1.2 Specification Reference Materials

Each specification sheet refers to actual table and data element names contained in the physical CID database. A graphic model of this database is presented in Appendix A. When reviewing any report specification, the reader may use this model to see exactly what tables and data elements are contributing data to the report. The table names are those labels that appear above the upper right hand corner of each square on the model. The names are preceded by "T_", and the second later designates the source system for the table. For example, the FIMS table "Property" is labeled T_F_Property.

The data elements in each table appear inside of each square on the model. The labels for the data elements appear with the one later source system designator, and then a three or four character code that designates to the table to which they belong. For example, waste type name is a data element in the table T_E_Waste_Stream_Header, the data element name is therefore E_WSH_waste_type_name.

Appendix D contains a list of updates to specification requirements that have occured since the last release (Release 3.0) of this document. Requirements often need to be adjusted during the course of development and implementation, and this list is a record of those changes. The changes listed in Appendix D have already been incorporated into the report formats and specification sheets contained in this document. This is done to ensure that CID developers have a single, current reference for each report produced from the CID.

4.2 Report Specifications

4.2.1 Ready-to-Read Report Specifications

4.2.1.1 Radioactive Waste, Contaminated Media, and Combination Reports

Report 1: Stream Detail Report

RAD-1:	Radioactive Waste: Annual Stream Quantity Detail
CM-1:	Ex Situ Contaminated Media: Annual Stream Quantity Detail
RAD/CM-1:	Combined Radioactive Waste and Contaminated Media: Annual Stream Quantity Detail

Description:

This report provides data at the lowest level of detail available in the database. Data is provided at the "stream" level. A "stream" in this database is defined as a group of materials, media, or wastes having similar origins or management requirements (i.e. same disposition path). The report can be produced for waste, ex situ contaminated media, or both. The report shows the annual (actual and projected) "material balance" in terms of volume for the waste or media stream. The material balance is represented as stream additions (newly generated waste/media, secondary waste/media streams produced from processing operations, or waste/media received from other sites), dispositions (waste/media treated, disposed or subject to other processing), and the inventory (amount of the stream in storage).

The user may report on:

- One or many States or Operations Offices
- One or many DOE Sites
- One or many DOE Generating Programs
- One or many waste/media types (i.e. HLW, LLW, etc)
- One or many streams

Applicable Records:

- **RAD-1**: All waste stream records where T_E_Waste_Stream_Header attribute E_WSH_In_Situ_ Stream = N, and E_WSH_Waste_Type_Name is NOT equal to "SNF," and E_WSH_Ex_Situ_Stream = N. In addition, attribute "Unit_Name" is NOT = "number of tanks" (NT) or "number of items" (NI).

- **CM-1:** All waste stream records where T_E_Waste_Stream_Header attribute E_WSH_In_Situ_ Stream = N, and E_WSH_Waste_Type_Name is NOT equal to "SNF," and E_WSH_Ex_Situ_Stream = Y. In addition, attribute "Unit_Name" is NOT = "number of tanks" (NT) or "number of items" (NI).

- **RAD/CM-1**: All waste stream records where T_E_Waste_Stream_Header attribute E_WSH_In_Situ_ Stream = N, and E_WSH_Waste_Type_Name is NOT equal to "SNF." In addition, attribute "Unit_Name" is NOT = "number of tanks" (NT) or "number of items" (NI).

Applicable Tables:

T_E_Waste_Stream_Header, T_E_WS_Isotope, T_E_WS_Activity_Header, T_E_WS_Activity_Annual, tx_Src_WS_Activity, tx_Disp_WS_Activity

Special Calculations/Formatting:

- Quantity data should be presented by rounding numbers to 3 significant digits to the right of the decimal. Add a footnote that explains if values are lower than .001 (rounded), they will appear as zero on the report. Totals should add the values first and then round the result to 3 significant digits to the right of the decimal.

- Read E_WSH_Gen_Prog_Code in T_E_Waste_Stream_Header table to identify all waste streams that match the selected generating program.

- For each waste stream, the print the source site using E_WSAH_Source_Geo_Site_Code in T_E_WS_Activity_Header, print the source activity using WS_Activity_Name (from tx_Src_WS _Activity) associated with E_WSAH_Source_WS_Activity_Code., print the source facility using E_Fac_Name (from T_E_Facility) associated with E_WSAH_Source_Facility_ID.

- For each waste stream, the print the destination site using E_WSAH_Disp_Geo_Site_Code in T_E_WS_Activity_Header, print the destination activity using WS_Activity_Name (from tx_Disp_WS _Activity) associated with E_WSAH_Disp_WS_Activity_Code., print the destination facility using E_Fac_Name (from T_E_Facility) associated with E_WSAH_Disp_Facility_ID.

- Inventory quantity amounts for each year for the stream are represented by the fields in the T_E_WS_Activity_Annual table E_WSAA_inv_FYXXXX (where XXXX presents each year). Print the quantities associated with each year.

- Addition quantity amounts for each year for the stream are represented by the fields in the T_E_WS_Activity_Annual table E_WSAA_source_FYXXXX (where XXXX presents each year). Print the quantities associated with each year.

- Disposition quantity amounts for each year for the stream are represented by the fields in the T_E_WS_Activity_Annual table E_WSAA_disp_FYXXXX (where XXXX presents each year). Print the quantities associated with each year.

- The "Totals FY99+" field should include all of the projected years added together (including non-annualized) for the additions and disposition columns. Inventory quantities cannot be added across years so total is provided. The label on this row should be updated after each annual update. For example, after the FY2000 data collection this label should read "Total FY00+".

Record Selection:

Users may select one, many or all values from the following lists, in order:

1. Reporting Period: To identify the data set they are working with - user can only select 1 item (Not currently implemented).

2. State or Operations Office: User should have option of either picking a state or picking an operations office - user can select one, many or all items.

3. Site: List should include only those sites that are part of the selected state or operations office.

4. Generating Program: List includes, EM, DP, SC, NE - user can select one, many or all valid programs for the site and state.

5. Waste Type: List includes HLW, HLW-Vitrified*, MLLW, LLW, TRU , and Other (other will include any waste types not specifically listed here). User can select one, many, or all items.

6. Stream Name: Lists the names of the streams for each waste type that the user selects.

* HLW-Vitrified is not a valid value for the waste type field. If the user selects this, we should show HLW streams where quantity amounts are reported with units of "# of HLW Canisters".

Sort/Group:

Sort Order:

State or Operations Office
Site
Program
Waste Type
Stream Name

Group Order:

State or Operations Office
Site
Program
Waste Type

Report 2: Management Activity Quantities by Site

RAD-2:	Radioactive Waste: Management Activity Quantities by Site
CM-2:	Ex-Site Contaminated Media: Management Activity Quantities by Site
RAD/CM-2:	Combined Radioactive Waste and Contaminated Media: Management Activity Quantities by Site

Description:

The report provides for a particular waste type the actual or projected quantities of waste/media for the major waste/media management activities (additions, treatment, disposal, and inventory) for selected sites over a selected date range. The waste/media quantities are summed over the date range selected. The report can be generated for multiple waste types, if desired. The report also shows quantities of waste where management is "to be determined" (TBD) at a later date. Starting and ending inventory amounts are also provided to present the full material balance. In addition, the report can be generated to include or exclude groundwater or wastewater quantities

The user may select to report on:

- One or more waste/media types (i.e. HLW, LLW, etc)
- One or more states or Operations offices
- One or more DOE sites
- One or more DOE generating programs
- A range of years
- Included or excluded groundwater/wastewater quantities

Applicable Records:

RAD-2: All waste stream records where T_E_Waste_Stream_Header attribute E_WSH_In_Situ_ Stream = N, and E_WSH_Waste_Type_Name is NOT equal to "SNF," and E_WSH_Ex_Situ_Stream = N. In addition, attribute "Unit_Name" is NOT = "number of tanks" (NT) or "number of items" (NI).

CM-2: All waste stream records where T_E_Waste_Stream_Header attribute E_WSH_In_Situ_ Stream = N, and E_WSH_Waste_Type_Name is NOT equal to "SNF," and E_WSH_Ex_Situ_Stream = Y. In addition, attribute "Unit_Name" is NOT = "number of tanks" (NT) or "number of items" (NI).

RAD/CM-2: All waste stream records where T_E_Waste_Stream_Header attribute E_WSH_In_Situ_ Stream = N, and E_WSH_Waste_Type_Name is NOT equal to "SNF." In addition, attribute "Unit_Name" is NOT = "number of tanks" (NT) or "number of items" (NI).

Applicable Tables:

T_E_Waste_Stream_Header, T_E_WS_Activity_Header, T_E_WS_Activity_Annual, tx_Src_WS_Activity, tx_Disp_WS_Activity

Special Calculations/Formatting:

- Quantity data should be presented by rounding numbers to 3 significant digits to the right of the decimal. Add a footnote that explains if values are lower than .001 (rounded), they will appear as zero on the report. Totals should add the values first and then round the result to 3 significant digits to the right of the decimal.

- Read the T_E_Waste_Stream_Header table to identify all waste streams that match the selected generating program (E_WSH_Gen_Prog_Code).

- The "Starting Inventory" column displays E_WSAA_inv_FYXXXX (where XXXX equals the first year in the selected range minus one FY) from T_E_WS_Activity_Annual for each selected site. (For example, starting inventory for the selected year range FY2000 through FY2006 would display inventory volumes for FY1999.)

- The "Total" row is a sum of each site volume for each activity. Provide totals for all columns .

- For the Radioactive waste report (RAD-2): The "New" column is a summation, by selected site, of all E_WSAA_source_FYXXXX (where XXXX equals the selected year(s)) waste stream volumes in T_E_WS_Activity_Annual that equal the selected waste type and where the WS_Activity_Category (in tx_Src_WS_Activity) of the E_WSAH_source_WS_activity_code in T_E_WS_Activity_Header = "GEN".

- For the Contaminated Media report (CM-2): The "New" column is a summation, by selected site, of all E_WSAA_source_FYXXXX (where XXXX equals the selected year(s)) waste stream volumes in T_E_WS_Activity_Annual that equal the selected waste type and where the WS_Activity_Category (in tx_Src_WS_Activity) of the E_WSAH_Source_WS_Activity_Code in T_E_WS_Activity_Header = "ERGEN".

- For the Combined Radioactive Waste and Contaminated Media report (RAD/CM-2): The "New" column is a summation, by selected site, of all E_WSAA_source_FYXXXX (where XXXX equals the selected year(s)) waste stream volumes in T_E_WS_Activity_Annual that equal the selected waste type and where the WS_Activity_Category (in tx_Src_WS_Activity) of the E_WSAH_source_WS_activity_code in T_E_WS_Activity_Header = "ERGEN" or “GEN”.

- The "Process Outputs" column is a summation, by selected waste type, of all E_WSAA_source_FYXXX (where XXXX equals the selected year(s)) waste stream volumes in T_E_WS_Activity_Annual that equal the selected waste type and where the WS_Activity_Category (in tx_Src_WS_Activity) of the E_WSAH_source_WS_activity_code in T_E_WS_Activity_Header = "SEC".

- The "Receipts" column is a summation, by waste type, of all E_WSAA_source_FYXXXX (where XXXX equals the selected years(s)) waste stream volumes that equal the selected waste type and where the where the WS_Activity_Category (in tx_Src_WS_Activity) of the E_WSAH_source_WS_activity_code in T_E_WS_Activity_Header = "RCPT".

- The "Treatment Quantity-On-Site" column is a summation, by selected waste type, of all E_WSAA_disp_FYXXXX (where XXXX equals the selected year(s)) waste stream volumes in

T_E_WS_Activity_Annual that equal the selected waste type and where the WS_Activity_Category (in tx_Disp_WS_Activity) of the E_WSAH_disp_WS_activity_code in T_E_WS_Activity_Header = "TRT" and the E_WSAH_disp_geo_site_code in the T_E_WS_Activity Header table is the same as E_WSH_geo_site_code in T_E_Waste_Stream_Header table.

- The "Treatment Quantity-Off-Site" column is a summation, waste type, of all E_WSAA_disp_FYXXXX (where XXXX equals the selected year(s)) waste stream volumes in T_E_WS_Activity_Annual that equal the selected waste type and where the WS_Activity_Category (in tx_Disp_WS_Activity) of the E_WSAH_disp_WS_activity_code in T_E_WS_Activity_Header = "TRT" and the E_WSAH_disp_geo_site_code in T_E_WS_Activity_Header is not the same as the E_WSH_geo_site_code in T_E_ Waste_Stream_Header, AND E_WSAH_disp_geo_site_code does not equal "TBD".

- The "Treatment Quantity-TBD" column is a summation, waste type, of all E_WSAA_disp_FYXXXX (where XXXX equals the selected year(s)) waste stream volumes in T_E_WS_Activity_Annual that equal the selected waste type and where the WS_Activity_Category (in tx_Disp_WS_Activity) of the E_WSAH_disp_WS_activity_code in T_E_WS_Activity_Header = "TRT" and E_WSAH_disp_geo_site_code in T_E_WS_Activity_ Header table is = "TBD".

- The "Disposal Quantity-On-Site" column is a summation, by waste type, of all E_WSAA_disp_FYXXXX (where XXXX equals the selected year(s)) waste stream volumes in T_E_WS_Activity_Annual that equal the selected waste type and where the WS_Activity_Category (in tx_Disp_WS_Activity) of the E_WSAH_disp_WS_activity_code in T_E_WS_Activity_Header = "DISP" and the E_WSAH_disp_geo_site_code in T_E_WS_Activity_Header table is the same as the E_WSH_geo_site_code in the T_E_Waste_Stream_Header table.

- The "Disposal Quantity-Off-Site" column is a summation, by waste type, of all E_WSAA_disp_FYXXXX (where XXXX equals the selected year(s)) waste stream volumes in T_E_WS_Activity_Annual that equal the selected waste type and where the WS_Activity_Category (in tx_Disp_WS_Activity) of the E_WSAA_disp_WS_activity_code in T_E_WS_Activity_Header = "DISP" and E_WSAH_disp_geo_site_code in the T_E_WS_Activity Header table is NOT the same as the E_WSH_geo_site_code in T_E_Waste_Stream_Header table AND the E_WSAH_disp_geo_site_code does not equal "TBD".

- The "Disposal Quantity-TBD" column is a summation, by waste type, of all E_WSAA_disp_FYXXXX (where XXXX equals the selected year(s)) waste stream volumes in T_E_WS_Activity_Annual that equal the selected waste type and where the WS_Activity_Category (in tx_Disp_WS_Activity) of the E_WSAH_disp_WS_activity_code in T_E_WS_Activity_Header ="DISP" and the E_WSAH_disp_geo_site_code in the T_E_WS_Activity_Header table = "TBD".

- The "Other Dispositions" column is a summation, by waste type, of all E_WSAA_disp_FYXXXX (where XXXX equals the selected year(s)) waste stream volumes in T_E_WS_Activity_Annual that equal the selected waste type and where the

WS_Activity_Category (in tx_Disp_WS_Activity) of the E_WSAH_disp_WS_activity_code in T_E_WS_Activity_Header = "OTHPR" or "NPDES", or "RRU" or "RECY".

- The "TBD Disposition" column is a summation, by waste type, of all E_WSAA_disp_FYXXXX (where XXXX equals the selected year(s)) waste stream volumes in T_E_WS_Activity_Annual that equal the selected waste type and where the WS_activity_category (in tx_Disp_WS_Activity) of the E_WSAH_disp_WS_activity_code in T_E_WS_Activity_Header = "TBD".

- The "Ending Inventory" column is a summation of all E_WSAA_inv_FYXXXX (where XXXX equals the LAST year in the range selected)) waste stream volumes for each selected site.

Record Selection:

Users may select one, many or all values from the following lists, in order:

1. Reporting Period: To identify the data set they are working with - user can only select 1 item. (Not currently implemented).
2. State or Operations Office: User should have option of either picking a state or picking an operations office - user can select one, many or all items.
3. Site: List should include only those sites that are part of the selected state or operations office.
4. Generating Program: List includes, EM, DP, SC, NE - user can select one, many or all valid programs for the state and site.
5. Year Range: List includes all years in the life cycle (i.e. 1999 through 2010 in 1 year increments, 2011 through 2070 in five year increments). User can select a starting year and ending year to establish a range OR a selection choice for "All Years - including Non-Annualized." When the user selects this option, the report will display data for all years (and year ranges), including non-annualized quantity data.
6. Waste Type: List includes HLW, HLW-Vitrified*, MLLW, LLW, TRU , and Other (other will include any waste types not specifically listed here). User can select one, many, or all items.
7. Physical Form: User will have the option of selecting 1 individual item from a list of Matrix Parameter Category (MPC) Codes (from txMPC_Code table) or may select from 1 option from the following:

   – "Groundwater/Wastewater Only": Include MPC Codes L1100 (Wastewaters),1300 (Ground/Surface Waters)
   – "No Groundwater/Wastewater": Include all MPC codes EXCEPT L1100 and L1300.
   – "Groundwater/Wastewater Included": Include all MPC Codes

*HLW-Vitrified is not a valid value for the waste type field. If the user selects this, we should show HLW streams where quantity amounts are reported with units of "# of HLW Canisters".

- The selection criteria for the user to pick a year or range of years needs to clearly identify what years are "Actual" data (current year and back), and what are "Projected Data" (greater than current year).

- Quantities presented in the report should include waste streams associated with the selected MPC or MPC groups. The report should not split out or group data by MPC codes.

Sort and Group:

Sort Order:	**Group Order:**
State or Operations Office	State or Operations Office
Program	Program
Year Range	Year Range
Waste Type	Waste Type
Site	Site

Report 3: Management Activity Quantities by Data Range

RAD-3:	Radioactive Waste: Management Activity Quantities by Date Range
CM-3:	Ex-Situ Contaminated Media: Management Activity Quantities by Date Range
RAD/CM-3:	Combined Radioactive Waste and Contaminated Media: Management Activity by Date Range

Description:

The report provides for a particular site and a particular waste type, the actual or projected annual quantities of waste/media for the major waste/media activities (additions, treatment, disposal, and inventory) for a selected date range. The report can be generated for multiple sites and waste types. The report also shows quantities of waste where management is "to be determined" (TBD) at a later date. Starting and ending inventory amounts are also provided to present the full material balance. In addition, the report can be generated to include or exclude groundwater or wastewater quantities

The user may select to report on:

- One or more states or Operations Offices
- One or more sites
- One or more DOE Generating Programs
- One or more waste/media types (i.e. HLW, LLW, etc)
- A range of years
- Included or excluded groundwater/wastewater quantities

Applicable Records:

RAD-3: All waste stream records where T_E_Waste_Stream_Header attribute E_WSH_In_Situ_ Stream = N, where attribute E_WSH_Waste_Type_Name is NOT equal to "SNF," and where attribute E_WSH_Ex_Situ_Stream = N. In addition, attribute E_WSH_Unit_Name is NOT = number of tanks (NT) or number of items (NI). Waste streams that have a value in the E_WSH_Parent_WS_Code field will be excluded.

CM-3: All waste stream records where T_E_Waste_Stream_Header attribute E_WSH_In_Situ_ Stream = N, where attribute E_WSH_Waste_Type_Name is NOT equal to "SNF," and where attribute E_WSH_Ex_Situ_Stream = Y. In addition, attribute E_WSH_Unit_Name is NOT = number of tanks (NT) or number of items (NI). Waste streams that have a value in the E_WSH_Parent_WS_Code field will be excluded.

RAD/CM-3: All waste stream records where T_E_Waste_Stream_Header attribute E_WSH_Waste_Type_Name is NOT equal to "SNF." In addition, attribute E_WSH_Unit_Name is NOT = number of tanks (NT) or number of items (NI). Waste streams that have a value in the E_WSH_Parent_WS_Code field will be excluded.

Applicable Tables:

T_E_Waste_Stream_Header, T_E_WS_Activity_Header, T_E_WS_Activity_Annual, tx_Src_WS_Activity, tx_Disp_WS_Activity

Special Calculations/Formatting:

- Quantity data should be presented by rounding numbers to 3 significant digits to the right of the decimal. Add a footnote that explains if values are lower than .001 (rounded), they will appear as zero on the report. Totals should add the values first and then round the result to 3 significant digits to the right of the decimal.

- Read the WasteStreamHeader table to identify all waste streams that match the selected generating program.

- The "Starting Inventory" column displays a summation, by year, of all E_WSAA_inv_FYXXXX (where XXXX equals the first year in the selected range minus one FY) from T_E_WS_Activity_Annual for streams that are a part of the selected site and waste type.

- For the Radioactive Waste Report (RAD-3): The "New" column is a summation, by year, of all E_WSAA_source_FYXXXX (where XXXX equals the selected year(s)) waste stream volumes in T_E_WS_Activity_Annual for the selected site and waste type where the WS_Activity_Category (in tx_Src_WS_Activity) of the E_WSAH_source_WS_activity_code in T_E_WS_Activity_Header = "GEN".

- For the Contaminated Media Report (CM-3): The "New" column is a summation, by year, of all E_WSAA_source_FYXXXX (where XXXX equals the selected year(s)) waste stream volumes in T_E_WS_Activity_Annual for the selected site and waste type where the WS_Activity_Category (in tx_Src_WS_Activity) of the E_WSAH_source_WS_activity_code in T_E_WS_Activity_Header = "ERGEN".

- For the Combined Radioactive Waste and Contaminated Media report (RAD/CM-3): The "New" column is a summation, by year, of all E_WSAA_source_FYXXXX (where XXXX equals the selected year(s)) waste stream volumes in T_E_WS_Activity_Annual that equal the selected site and waste type and where the WS_Activity_Category (in tx_Src_WS_Activity) of the E_WSAH_source_WS_activity_code in T_E_WS_Activity_Header = "ERGEN" or “GEN”.

- The "Process Outputs" column is a summation, by year, of all E_WSAA_source_FYXXX (where XXXX equals the selected year(s)) waste stream volumes in T_E_WS_Activity_Annual for the selected site and waste type where the WS_Activity_Category (in tx_Src_WS_Activity) of the E_WSAH_source_WS_activity_code in T_E_WS_Activity_Header ="SEC".

- The "Receipts" column is a summation, by year, of all E_WSAA_source_FYXXXX (where XXXX equals the selected years(s)) waste stream volumes for the selected site and waste type where the WS_Activity_Category (in tx_Src_WS_Activity) of the E_WSAH_source_WS_activity_code in T_E_WS_Activity_Header = "RCPT".

- The "Treatment Quantity-On-Site" column is a summation, by year, of all E_WSAA_disp_FYXXXX (where XXXX equals the selected year(s)) waste stream volumes in T_E_WS_Activity_Annual for the selected site and waste type where the WS_Activity_Category (in tx_Disp_WS_Activity) of the E_WSAH_disp_WS_activity_code in T_E_WS_Activity_Header = "TRT", and the E_WSAH_disp_geo_site_code in T_E_WS_Activity_Header is the same as the E_WSH_geo_site_code in T_E_Waste_Stream_Header.

- The "Treatment Quantity-Off-Site" column is a summation, by year, of all E_WSAA_disp_FYXXXX (where XXXX equals the selected year(s)) waste stream volumes in T_E_WS_Activity_Annual for the selected site and waste type where the WS_Activity_Category (in tx_Disp_WS_Activity) of the E_WSAH_disp_WS_activity_code in T_E_WS_Activity_Header = "TRT", and the E_WSAH_disp_geo_site_code in the T_E_WS_Activity Header table is not the same as the E_WSAH_geo_site_code in T_E_Waste_Stream_Header AND the E_WSAH_disp_geo_site_code does not equal "TBD".

- The "Treatment Quantity-TBD" column is a summation, by year, of all E_WSAA_disp_FYXXXX (where XXXX equals the selected year(s)) waste stream volumes in T_E_WS_Activity_Annual for the selected site and waste type where the WS_Activity_Category (in tx_Disp_WS_Activity) of the E_WSAH_disp_WS_activity_code in T_E_WS_Activity_Header = "TRT", and the T_E_WSAH_disp_geo_site_code in the T_E_WS_Activity_Header table = "TBD".

- The "Disposal Quantity-On-Site" column is a summation, by year, of all E_WSAA_disp_FYXXXX (where XXXX equals the selected year(s)) waste stream volumes in T_E_WS_Activity_Annual for the selected site and waste type where the WS_Activity_Category (in tx_Disp_WS_Activity) of the E_WSAH_disp_WS_activity_code in T_E_WS_Activity_Header = "DISP" and the E_WSAH_disp_geo_site_code in T_E_WS_Activity_Header is the same as E_WSH_geo_site_code in T_E_Waste_Stream_Header.

- The "Disposal Quantity-Off-Site" column is a summation, by year, of all E_WSAA_disp_FYXXXX (where XXXX equals the selected year(s)) waste stream volumes in T_E_WS_Activity_Annual for the selected site and waste type the where the WS_Activity_Category (in tx_Disp_WS_Activity) of the E_WSAH_disp_WS_activity_code in T_E_WS_Activity_Header = = "DISP", and the E_WSAH_disp_geo_site_code in T_E_WS_Activity_Header is NOT the same as E_WSH_geo_site_code in T_E_Waste_Stream_Header AND the E_WSAH_disp_geo_site_code does not equal "TBD".

- The "Disposal Quantity-TBD" column is a summation, by year, of all E_WSAA_disp_FYXXXX (where XXXX equals the selected year(s)) waste stream volumes in T_E_WS_Activity_Annual for the selected site and waste type where the WS_Activity_Category (in tx_Disp_WS_Activity) of the E_WSAH_source_WS_activity_code in T_E_WS_Activity_Header == "DISP", and the E_WSAH_disp_geo_site_code in the T_E_WS_Activity_Header table = "TBD".

- The "Other Dispositions" column is a summation, by year, of all E_WSAA_disp_FYXXXX (where XXXX equals the selected year(s)) waste stream volumes in T_E_WS_Activity_Annual for the selected site and waste type where the WS_Activity_Category (in tx_Disp_WS_Activity) of the E_WSAH_disp_WS_activity_code in T_E_WS_Activity_Header = "OTHPR" or "NPDES" or "RRU" or "RECY".

- The "TBD Disposition" column is a summation, by year, of all E_WSAA_disp_FYXXXX (where XXXX equals the selected year(s)) waste stream volumes in T_E_WS_Activity_Annual for the selected site and waste type where the WS_Activity_Category (in tx_Disp_WS_Activity) of the E_WSAH_disp_WS_activity_code in T_E_WS_Activity_Header = "TBD".

- The "Ending Inventory" column is a summation, by year, of all E_WSAA_inv_FYXXXX (where XXXX equals the selected year(s)) waste stream volumes for the selected site and waste type.

- The "Total for Selected Years" row is a sum of each years volume for each activity. Provide totals for all columns except "Starting Inventory"and "Ending Inventory".

Record Selection:

Users may select one, many or all values from the following lists, in order:

1. Reporting Period: To identify the data set they are working with - user can only select 1 item (Not currently implemented).
2. State or Operations Office: User should have option of either picking a state or picking an operations office - user can select one, many or all items.
3. Site: List should include only those sites that are part of the selected state or operations office.
4. Generating Program: List includes, EM, DP, SC, NE - user can select one, many or all valid items for the site and state.
5. Year Range: List includes all years in the life cycle (i.e. 1999 through 2010 in 1 year increments, 2011 through 2070 in five year increments). User can select a starting year and an ending year to establish a range OR a selection choice for "All Years - including Non-Annualized." When the user selects this option, the report will display data for all years (and year ranges), including non-annualized quantity data.
6. Waste Type: List includes HLW, HLW-Vitrified*, MLLW, LLW, TRU , and Other (other will include any waste types not specifically listed here). User can select one, many, or all items.
7. Physical Form: User will have the option of selecting one individual item from a list of Matrix Parameter Category (MPC) Codes (from txMPC_Code table) or may select from one of the following:

    – "Groundwater/Wastewater Only": Include MPC Codes L1100 (Wastewaters), L1300 (Ground/Surface Waters)
    – "No Groundwater/Wastewater": Include all MPC codes EXCEPT L1100 and L1300.
    – "Groundwater/Wastewater Included": Include all MPC Codes

*HLW-Vitrified is not a valid value for the waste type field. If the user selects this, we should show HLW streams where quantity amounts are reported with units of "# of HLW Canisters".

- The selection criteria for the user to pick a year or range of years needs to clearly identify what years are "Actual" data (current year and back), and what are "Projected Data" (greater than current year).

- Quantities presented in the report should include waste streams associated with the selected MPC or MPC groups. The report should not split out or group data by MPC codes.

Sort and Group:

Sort Order:	**Group Order:**
State or Operations Office	State or Operations Office
Site	Site
Program	Program
Waste Type	Waste Type

Report 4: Management Activities by Waste Type

RAD-4:	Radioactive Waste: Management Activities by Waste Type
CM-4:	Contaminated Media: Ex-Situ Contaminated Media Waste Management Activities by Waste Type
RAD/CM-4:	Combined Radioactive Waste and Contaminated Media: Summary Management Activities by Waste Type

Description:

This report provides for a particular a site and particular date range, a tabular summary of waste or ex situ contaminated media management activity quantities by waste type. The report can be generated for multiple sites.

This report displays waste and/or contaminated media (e.g., groundwater) quantities at a selected DOE site or sites associated with (a) waste addition (i.e., newly generated waste, waste derived from other processes, or waste received from another site), (b) waste disposition (i.e., treatment or disposal), or (c) waste in inventory (i.e., storage). The report identifies waste and contaminated media quantities as either actual or projected. In cases where the waste management option has not been determined, the report displays waste quantities as "to be determined" (TBD) at a later date. The user may select waste or media type, years or ranges of years, DOE site, and the DOE program which controls the waste or media. The quantities are summed over the date range selected, and starting and ending inventory amounts are also provided to present the full material balance. Because much of the quantity data includes groundwater and waste water, the user may view quantities where these media are either included or excluded from totals.

The user may select to report on:

- One or more states or Operations offices
- One or more DOE sites
- One or more DOE Generating Programs
- A range of years
- One or more waste/media types (i.e. HLW, LLW)
- Included or excluded groundwater/wastewater quantities

Applicable Records:

RAD-4: All waste stream records where T_E_Waste_Stream_Header attribute E_WSH__in_situ_ stream = N, where attribute E_WSH_waste_type_code is NOT equal to "SNF," and where attribute E_WSH_ex_situ_stream = N. In addition, attribute E_WSH_Unit_Name is NOT = "# of tanks" or "number of items." Waste streams that have a value in the E_ESH_Parent_WS_Code field of the T_E_Waste_Stream_Header table will be excluded.

CM-4: All waste stream records where T_E_Waste_Stream_Header attribute E_WSH_insitu_ stream = N, where attribute E_WSH_waste_type_code" is NOT equal to "SNF," and where attribute E_WSH_ex_situ_stream = Y. In addition, attribute E_WSH_Unit_Name" is NOT = "# of tanks" or "number of items." Waste streams that have a value in the E_WSH_Parent_WS_Code field of the T_E_Waste_Stream_Header table will be excluded.

RAD/CM-4: All waste stream records where T_E_Waste_Stream_Header attribute E_WSH_in_situ_ stream = N, and where attribute E_WSH_waste_type_code is NOT equal to "SNF." In addition, attribute E_WSH_Unit_Name" is NOT = "# of tanks" or "number of items." Waste streams that have a value in the E_WSH_Parent_WS_Code field of the T_E_Waste_Stream_Header table will be excluded.

Applicable Tables:

T_E_Waste_Stream_Header, T_E_WS_Activity_Header, T_E_WS_Activity_Annual, tx_SRC_WS_Activity**,** tx_Disp_WS_Activity

Special Calculations/Formatting:

- Quantity data should be presented by rounding numbers to 3 significant digits to the right of the decimal. Add a footnote that explains if values are lower than .001 (rounded), they will appear as zero on the report. Totals should add the values first and then round the result to 3 significant digits to the right of the decimal.

- Read the T_E_Waste_Stream_Header table to identify all waste streams that match the selected generating program.

- The "Starting Inventory" column displays E_WSAA_inv_FYXXXX (where XXXX equals the first year in the selected range minus one FY) for each selected site. (For example, starting inventory for the selected year range FY2000 through FY2006 would display inventory volumes for FY1999.)

- For the radioactive waste report (RAD-4): The "New" column is a summation, by selected waste type, of all E_WSAA_source_FYXXXX (where XXXX equals the selected year(s)) waste stream volumes in T_E_WS_Activity_Annual where the WS_activity_category_code (in tx_Src_WS_Activity) of the E_WSAH_source_WS_activity_code in T_E_WS_Activity_Header = "GEN".

- For the Contaminated Media Report (CM-4): The "New" column is a summation, by selected waste type, of all E_WSAA_source_FYXXXX (where XXXX equals the selected year(s)) waste stream volumes in T_E_WS_Activity_Annual where the where WS_activity_category_code (in tx_Src_Activity) of the E_WSAH_source_WS_activity_code in T_E_WS_Activity_Header = "ERGEN".

- For the Combined Radioactive Waste and Contaminated Media report (RAD/CM-4): The "New" column is a summation, by selected site, of all E_WSAA_source_FYXXXX (where XXXX equals the selected year(s)) waste stream volumes in T_E_WS_Activity_Annual that equal the selected waste type and where the WS_activity_category_code (in tx_Src_WS_Activity) of the E_WSAH_source_WS_activity_code in T_E_WS_Activity_Header = "ERGEN" or “GEN”.

- The "Process Outputs" column is a summation, by selected waste type, of all source_FYXXX (where XXXX equals the selected year(s)) waste stream volumes in T_E_WS_Activity_Annual for where the where the WS_activity_category_code (in tx_Src_WS_Activity) of the E_WSAH_source_WS_activity_code in T_E_WS_Activity_Header = "SEC".

- The "Receipts" column is a summation, by waste type, of all E_WSAA_source_FYXXXX (where XXXX equals the selected years(s)) waste stream volumes where the where the WS_activity_category_code (in tx_Src_WS_Activity) of the E_WSAH_source_WS_activity_code in T_E_WS_Activity_Header = "RCPT".

- The "Treatment Quantity-On-Site" column is a summation, by selected waste type, of all E_WSAA_disp_FYXXXX (where XXXX equals the selected year(s)) waste stream volumes in T_E_WS_Activity_Annual where the where the WS_activity_category_code (in tx_Disp_WS_Activity) of the disp_WS_activity_code in T_E_WS_Activity_Header = "TRT" and the E_WSAH_disp_geo_site_code in the WS_Activity Header table is the same as the E_WSH_geo_site_code in the T_E_Waste_Stream_Header table.

- The "Treatment Quantity-Off-Site" column is a summation, waste type, of all E_WSAA_disp_FYXXXX (where XXXX equals the selected year(s)) waste stream volumes in T_E_WS_Activity_Annual where the where the WS_activity_category_code (in tx_Disp_WS_Activity) of the E_WSAH_disp_WS_activity_code in T_E_WS_Activity_Header = "TRT" and the E_WSAH_disp_geo_site_code in the WS_Activity Header table is not the same as the E_WSH_geo_site_code in the T_E_Waste_Stream_Header table AND the E_WSAH_disp_geo_site_code does not equal "TBD".

- The "Treatment Quantity - TBD" column is a summation, by waste type, of all E_WSAA_disp_FYXXXX (where XXXX equals the selected year(s)) waste stream volumes in T_E_WS_Activity_Annual where the WS_activity_category_code (in tx_Disp_WS_Activity) of the E_WSAH_disp_WS_activity_code in T_E_WS_Activity_Header = "TBD".

- The "Disposal Quantity-On-Site" column is a summation, by waste type, of all E_WSAA_disp_FYXXXX (where XXXX equals the selected year(s)) waste stream volumes in T_E_WS_Activity_Annual where the where the WS_activity_category_code (in tx_Disp_WS_Activity) of the E_WSAH_disp_WS_activity_code in T_E_WS_Activity_Header = "DISP"and the E_WSAH_disp_geo_site_code in the T_E_WS_Activity_Header table is the same as the E_WSH_geo_site_code in the T_E_Waste_Stream_Header table.

- The "Disposal Quantity-Off-Site" column is a summation, by waste type, of all E_WSAA_disp_FYXXXX (where XXXX equals the selected year(s)) waste stream volumes in T_E_WS_Activity_Annual where the where the WS_activity_category_code (in tx_Disp_WS_Activity) of the E_WSAH_disp_WS_activity_code in T_E_WS_Activity_Header = "DISP"and the E_WSAH_disp_geo_site_code in the WS_Activity Header table is NOT the same as the E_WSH_geo_site_code in the T_E_Waste_Stream_Header table AND the E_WSAH_disp_geo_site_code does not equal "TBD".

- The "Disposal Quantity- TBD" column is a summation, by waste type, of all E_WSAA_disp_FYXXXX (where XXXX equals the selected year(s)) waste stream volumes in T_E_WS_Activity_Annual where the where the WS_activity_category_code (in tx_Disp_WS_Activity) of the E_WSAH_disp_WS_activity_code in T_E_WS_Activity_Header = "TBD".

- The "Other Dispositions" column is a summation, by waste type, of all E_WSAA_disp_FYXXXX(where XXXX equals the selected year(s)) waste stream volumes in T_E_WS_Activity_Annual where the where the WS_activity_category_code (in

tx_Disp_WS_Activity) of the E_WSAH_disp_WS_activity_code in T_E_WS_Activity_Header = "OTHPR" or "NPDES", or "RRU" or "RECY".

- The "TBD Disposition" column is a summation, by waste type, of all E_WSAA_disp_FYXXXX (where XXXX equals the selected year(s)) waste stream volumes in T_E_WS_Activity_Annual where the where the WS_activity_category_code (in tx_Disp_WS_Activity) of the E_WSAH_disp_WS_activity_code in T_E_WS_Activity_Header = "TBD".

- The "Ending Inventory" column is a summation of all E_WSAA_inv_FYXXXX (where XXXX equals the last year in the year range) waste stream volumes for each selected waste type.

- The “Total” row is a sum of each site volume for each activity. Provide totals for all columns except Starting and Ending Inventory.

Record Selection:

Users may select one, many or all values from the following lists, in order:

1. Reporting Period: To identify the data set they are working with - user can only select 1 item (Not currently implemented).
2. State or Operations Office: User should have option of going either picking a state or picking an operations office - user can select one, many or all items.
3. Site: List should include only those sites that are part of the selected state or operations office.
4. Generating Program: List includes, EM, DP, SC, NE - user can select one, many or all items.
5. Year Range: List includes all years in the life cycle (i.e. 1999 through 2010 in 1 year increments, 2011 through 2070 in five year increments). User can select a start and end year to establish a range OR a selection choice for "All Years - including Non-Annualized". When the user selects this option, the report will display data for all years (and year ranges), including non-annualized quantity data.
6 Waste Type: List includes HLW, HLW-Vitrified*, MLLW, LLW, TRU , and Unspecified. User can select one, many, or all items.
7. Physical Form: User will have the option of selecting one individual item from a list of Matrix Parameter Category (MPC) Codes (from txMPC_Code table) OR may select one of the following:

   "Groundwater/Wastewater Only": Include MPC Codes L1100 (Wastewaters), L1300 (Ground/Surface Waters)
   "No Groundwater/Wastewater": Include all MPC codes EXCEPT L1100 and L1300.
   "Groundwater/Wastewater Included": Include all MPC Codes

*HLW-Vitrified is not a valid value for the waste type field. If the user selects this, we should show HLW streams where quantity amounts are reported with units of "# of HLW Canisters".

- The selection criteria for the user to pick a year or range of years needs to clearly identify what years are "Actual" data (current year and back), and what are "Projected Data" (greater than current year).

- Quantities presented in the report should include waste streams associated with the selected MPC or MPC groups. The report should not split out or group data by MPC codes.

Sort and Group:

Sort Order:	**Group Order:**
State or Operations Office	State or Operations Office
Site	Site
Program	Program
Year Range	Year Range
Waste Type	Waste Type

Report 5: Shipping and Receiving Summary

RAD-5:	Radioactive Waste: Shipping and Receiving Summary
CM-5:	Contaminated Media: Ex-Situ Contaminated Media Shipping and Receiving Summary
RAD/CM-5:	Combined Radioactive Waste and Contaminated Media: Shipping and Receiving Summary

Description:

This report summarizes the waste and ex-situ contaminated media shipping and receiving activity across the DOE-complex by waste type.

The user selects a range of years and a waste type to track shipping and receiving activity. There are seven DOE sites that receive most of the waste: Hanford, Idaho National Environmental Engineering Laboratory, Los Alamos, Oak Ridge, Savannah River, Nevada Test Site, and the Waste Isolation Pilot Plant. Commercial sites also receive DOE waste and these waste quantities are reported under the "Commercial and Other DOE Sites" column. Occasionally waste or media will be sent to a DOE site other than those listed above. These quantities will also be included in the “Commercial and Other DOE Sites” column. A footnote at the bottom of the report will provide details on which DOE sites are receiving any waste or media. If DOE sites plan on shipping waste but have not yet determined which DOE site will receive the waste, these quantities are reported under the "To Be Determined (TBD)" column. Quantities are presented for each site that is, or is planning to, ship to one of the DOE or commercial receiving sites.

The user may select to report on:

- One or more waste/media types (i.e. HLW, LLW, etc)
- A range of years
- One or more DOE Generating Programs

Applicable Records:

RAD-5: All waste stream records where WasteStreamHeader attribute "is_insitu_ stream" = N, where attribute "waste_type_code" is NOT equal to "SNF," and where attribute "is_ex-situ_media" = N. In addition, attribute "Unit_Name" is NOT = "# of tanks" or "number of items." Waste streams that have a value in the Parent_WS_Code field of the WasteStreamHeader table will be excluded.

CM-5: All waste stream records where WasteStreamHeader attribute "is_insitu_ stream" = N, where attribute "waste_type_code" is NOT equal to "SNF," and where attribute "is_ex-situ_media" = Y. In addition, attribute "Unit_Name" is NOT = "# of tanks" or "number of items." Waste streams that have a value in the Parent_WS_Code field of the WasteStreamHeader table will be excluded.

RAD/CM-5: All waste stream records where WasteStreamHeader attribute "is_insitu_ stream" = N, and where attribute "waste_type_code" is NOT equal to "SNF." In addition, attribute "Unit_Name" is NOT = "# of tanks" or "number of items." Waste streams that have a value in the Parent_WS_Code field of the WasteStreamHeader table will be excluded.

Applicable Tables:

T_E_WasteStreamHeader, T_E_WS_Activity_Header, T_E_WS_Activity Annual, tx_Src_WS_Activity,

Special Calculations/Formatting:

- Quantity data should be presented by rounding numbers to 3 significant digits to the rightof the decimal. Add a footnote that explains if values are lower than .001 (rounded), they will appear as zero on the report. Totals should add the values first and then round the result to 3 significant digits to the right of the decimal.

- The valid Receiving Sites (columns) are: Hanford (HASI), INEEL (INEL), Los Alamos (LANL), Oak Ridge (ORTN), Savannah River (SARS), Nevada Test Site (NVTS), Waste Isolation Pilot Plant (WIPP), Commercial and Other DOE Sites (COMM), and TBD Site (TBD).

- Read the T_E_WasteStreamHeader table, attribute T_E_WSH_Gen_Prog_Code to identify all waste streams that match the selected DOE program.

- Identify each site in the state or Operations Office selected.

- Identify all waste streams for the applicable sites that meet the waste type criteria.

- For all Receiving Sites EXCEPT “Commercial and Other DOE Sites” column and “TBD Site Column”: For all waste stream records, read the geo_site_code in waste stream header to obtain all waste streams where the geo_site_code is equal to one of the above sites. For each waste stream, read the T_E_WS_Activity_Header table to obtain the source_geo_site_code. If the source_geo_site code is different from the receiving site (geo_site_code), this is a shipping site. Exclude waste streams for source_geo_sites where the Geographic Site Category (from Site Table) is "COMM" and where it is "TBD" For each shipping, receiving site pair, read the source_FYXXXX (where XXXX = the selected year(s)) values from the T_E_WS_Activity_Annual table and sum the volumes for the years selected.

- For “Commercial and Other DOE Site” column: Read the T_E_WS_Activity_Header table to identify waste streams where the disp_geo_site_code is different from the geo_site_code in the T_E_WasteStreamHeader table AND the Geographic Site Category (from Site Table) of the disp_geo_site_code is equal to "COMM", OR, where the Geographic Site Category of the disp_geo_site_code is “N-DOE” and the site code is NOT equal to “DOE”. These are either commercial receiving sites or non reporting DOE sites. The shipping sites will be the geo_site_code in the T_E_WasteStreamHeader table. For each pair of shipping and COMM/N-DOE (non DOE site code) sites, read the T_E_WS_Activity_Header table for each stream and sum the disp_FYXXXX (where XXXX = the selected year(s)) values for the years selected. For each shipping, receiving site pair, read the disp_FYXXXX (where XXXX = the selected year(s)) values from the T_E_WS_Activity_Header table and sum the volumes for the years selected.

- For “Commercial and Other DOE Site” column: If the geo_site_code in T_E_WasteStreamHeader is different from the disp_geo_site_code in T_E_WS_Activity_Header AND [the S_Site_Geo_Site_Category of the disp_geo_site_code is equal to R-DOE AND is not one of the hard-coded sites], include the disp_FYXXXX quantity in the Commercial and Other DOE Site column/category (where XXXX represents the years selected by the user or included

on the ship/receive report). If the geo_site_code in T_E_WasteStreamHeader is different from the disp_geo_site_code in T_E_WS_Activity_Header AND [the S_Site_Geo_Site_Category of the disp_geo_site_code is equal to R-DOE AND is not one of the hard-coded sites], include the disp_FYXXXX quantity in the Commercial and Other DOE Site column/category (where XXXX represents the years selected by the user or included on the ship/receive report).

- For “TBD Receiving Site” column: Read the T_E_WS_Activity_Header table to identify waste streams where the the disp_geo_site_code is different from the geo_site_code in the Waste Stream Header table AND the Geographic Site Category (from Site Table) of the disp_geo_site_code is equal to "TBD”, OR, the disp_geo_site_code is equal to “DOE”. These are "to be determined" receiving sites. The shipping sites will be the geo_site_code in the T_E_WasteStreamHeader table. For each pair of shipping and TBD sites, read the T_E_WS_Activity_Header table for each stream and sum the disp_FYXXXX (where XXXX = the selected year(s)) values for the years selected.

- The Shipping Site Total column is a summation of all the quantities for a given shipping site (added across the row in the sample format).

- The Receiving Site Total is a summation of all of the quantities for a given receiving site (added down the column).

Record Selection:

1. Reporting Period: To identify the data set they are working with - user can only select 1 item (Not currently implemented).
2. Generating Program: List includes valid program options based on the selection criteria already selected. Valid programs may include EM, DP, SC, NE. User can select one, many or all items.
3. Year Range: List includes all years in the life cycle (i.e. 1999 through 2010 in 1 year increments, 2011 through 2070 in five year increments). User can select start and end date to establish a year range OR a selection choice for "All Years - including Non-Annualized." When the user selects this option, the report will display data for all years (and year ranges), including non-annualized quantity data.
4. Waste Type: List includes HLW, HLW-Vitrified*, MLLW, LLW, TRU , and Other (other will include any waste types not specifically listed here). User can select one, many, or all items.
5. Physical Form: User will have the option of selecting one individual item from a list of Matrix Parameter Category (MPC) Codes (from txMPC_Code table) OR may select one of the following:

   – "Groundwater/Wastewater Only": Include MPC Codes L1100 (Wastewaters), L1300 (Ground/Surface Waters)
   – "No Groundwater/Wastewater": Include all MPC codes EXCEPT L1100 and L1300.
   – "Groundwater/Wastewater Included": Include all MPC Codes

*HLW-Vitrified is not a valid value for the waste type field. If the user selects this, we should show HLW streams where quantity amounts are reported with units of "# of HLW Canisters".

- Quantities presented in the report should include waste streams associated with the selected MPC or MPC groups. The report should not split out or group data by MPC codes.

Sort and Group:

Sort Order:	**Group Order:**
Program	Program
Waste Type	Waste Type
Year Range	Year Range
Site	Site

Report 6: Annual Shipping and Receiving Quantities

RAD-6:	Radioactive Waste: Annual Shipping and Receiving Quantities
CM-6:	Contaminated Media: Ex-Situ Contaminated Media Annual Shipping and Receiving Quantities
RAD/CM-6:	Combined Radioactive Waste and Ex-Situ Contaminated Media: Annual Shipping and Receiving Quantities

Description:

This report presents for a particular receiving site, the annual quantities of waste (by waste type) shipped, or planned to be shipped to that site. The report can be generated for multiple receiving sites or waste types.

There are seven DOE sites that receive waste: Hanford, Idaho National Environmental Engineering Laboratory, Los Alamos, Oak Ridge, Savannah River, Nevada Test Site, and the Waste Isolation Pilot Plant. Commercial sites also receive DOE waste and are a valid receiving site selection for this report. To obtain information on shipments that DOE plans to make, but has not determined the receiving site, the user can select the "To Be Determined (TBD)" receiving site. Occasionally waste or media will be sent to a DOE site other than those listed above. Although this situation occurs rarely, a selection is available to select “Other DOE Site” to receive information on quantities sent to DOE sites not listed above. Quantities are presented for each site that is, or is planning to, ship to the selected receiving site(s). The user may also select the DOE generating program of interest.

The user may report on:

- One or more DOE sites that receive waste/media (i.e. "Receiving Site")
- One or more DOE Generating Programs
- One or more waste/media types (i.e HLW, LLW, etc)

Applicable Records:

RAD-6: All waste stream records where WasteStreamHeader attribute "is_insitu_ stream" = N, where attribute "waste_type_code" is NOT equal to "SNF," and where attribute "is_ex-situ_media" = N. In addition, attribute "Unit_Name" is NOT = "# of tanks" or "number of items." Waste streams that have a value in the Parent_WS_Code field of the WasteStreamHeader table will be excluded

CM-6: All waste stream records where WasteStreamHeader attribute "is_insitu_ stream" = N, where attribute "waste_type_code" is NOT equal to "SNF," and where attribute "is_ex-situ_media" = Y. In addition, attribute "Unit_Name" is NOT = "# of tanks" or "number of items." Waste streams that have a value in the Parent_WS_Code field of the WasteStreamHeader table will be excluded.

RAD/CM-6: All waste stream records where WasteStreamHeader attribute "is_insitu_ stream" = N, and where attribute "waste_type_code" is NOT equal to "SNF." In addition, attribute "Unit_Name" is NOT = "# of tanks" or "number of items." Waste streams that have a value in the Parent_WS_Code field of the WasteStreamHeader table will be excluded.

Applicable Tables:

T_E_WasteStreamHeader, T_E_WS_Activity_Header, T_E_WS_Activity Annual, tx_Src_WS_Activity, tx_Geographic_Site

Special Calculations/Formatting:

- Quantity data should be presented by rounding numbers to 3 significant digits to the right of the decimal. Add a footnote that explains if values are lower than .001 (rounded), they will appear as zero on the report. Totals should add the values first and then round the result to 3 significant digits to the right of the decimal.

- Read the T_E_WasteStreamHeader table to identify all waste streams that match the selected generating program.

- Identify all waste streams for the selected waste type(s) and the selected RECEIVING site.(geo_site_code in T_E_WasteStreamHeader must equal selected RECEIVING site, unless RECEIVING site is "To Be Determined" or "Commercial" or "Other DOE Site").

- For the DOE Receiving Sites, read the T_E_WS_Activity_Header table, if the source_geo_site_code is not the same as the geo_site_code in the T_E_WasteStreamHeader table, the source_geo_site_code is a shipping site. For each shipping site identified for the selected DOE receiving site, read the T_E_WS_Activity_Annual table for each of the source_FYXXXX volumes and list the amount for each year and site combination. For the source_FY 2011-2070 and for non-annualized volumes, sum all values and display in the "2011-70(P) & Non-Annualized" column.

- If the "Commercial" receiving site is selected, read the T_E_WS_Activity Header table, and select records where the disp_geo_site code is different from the geo_site_code in the T_E_WasteStreamHeader AND the geo_site_category of the disp_geo_site is = "COMM". In this case, the shipping site is the geo_site_code in the T_E_WasteStreamHeader table and the receiving site(s) are the disp_geo_site code in the T_E_WS_Activity_Annual table. For each shipping site identified for the commercial site, read the T_E_WS_Activity_Annual table for each of the disp_FYXXXX volumes and list the amount for each year and site combination. For the disp_FY 2011-2070 and for non-annualized volumes, sum all values and display in the "2011-70(P) & Non-Annualized" column.

- If the "To Be Determined" receiving site is selected, read the T_E_WS_Activity Header table, and select records where the disp_geo_site code is different from the geo_site_code in the T_E_WasteStreamHeader AND the geo_site_category of the disp_geo_site is = "TBD" or the disp_geo_site code = "DOE". In this case, the shipping site is the geo_site_code in the T_E_WasteStreamHeader table and the receiving site(s) are the disp_geo_site code in the T_E_WS_Activity_Annual table. For each shipping site identified for the receiving site, read the T_E_WS_Activity_Annual table for each of the disp_FYXXXX volumes and list the amount for each year and site combination. For the disp_FY 2011-2070 and for non-annualized volumes, sum all values and display in the "2011-70(P) & Non-Annualized" column.

- If the "Other DOE Site" receiving site is selected, read the T_E_WS_Activity_Header table, and select records where the disp_geo_site code is different from the geo_site_code in the

T_E_WasteStreamHeader. Of these records, select the records where (1) the geo_site_category of the disp_geo_site is = "N-DOE" and the disp_geo_site code is NOT EQUAL to "DOE" OR (2) where the s_site_geo_site_category of the disp_geo_site_code is equal to R-DOE AND is not one of the hard-coded sites. In this case, the shipping site is the geo_site_code in the T_E_WasteStreamHeader table and the receiving site(s) are the disp_geo_site code in the T_E_WS_Activity_Annual table. For each shipping site identified for the receiving site, read the T_E_WS_Activity_Annual table for each of the disp_FYXXXX volumes and list the amount for each year and site combination. For the disp_FY 2011-2070 and for non-annualized volumes, sum all values and display in the "2011-70(P) & Non-Annualized" column.

- The "Total" row represents all volumes shipped to the receiving site for each year (summed down each column)

Record Selection:

1. Reporting Period: To identify the data set they are working with - user can only select 1 item. (Not currently implemented.)
2. Receiving Site: The receiving site selection list should only include the following sites:

   – Hanford
   – Idaho National Environmental Engineering Laboratory (INEEL)
   – Savannah River
   – Los Alamos
   – Oak Ridge
   – Nevada Test Site
   – Waste Isolation Pilot Plant
   – Commercial
   – To Be Determined
   – Other DOE Site

3. Generating Program: List includes valid program options based on the selection criteria already selected. Valid programs may include EM, DP, SC, NE. User can select one, many or all items.
4. Waste Type: List includes HLW, HLW-Vitrified*, MLLW, LLW, TRU , and Other (other will include any waste types not specifically listed here). User can select one, many, or all items.

*HLW-Vitrified is not a valid value for the waste type field. If the user selects this, we should show HLW streams where quantity amounts are reported with units of "# of HLW Canisters".

Sort and Group:

Sort Order:	**Group Order:**
Receiving Site	Receiving Site
Program	Program
Waste Type	Waste Type
Shipping Site	Shipping Site

Report 7: Stream Quantities for Selected Management Activities

RAD-7:	Radioactive Waste: Stream Quantities for Selected Management Activities
CM-7:	Contaminated Media: Ex-Situ Contaminated Media Stream Quantities for Selected Management Activities
RAD/CM-7:	Combined Radioactive Waste and Ex-Situ Contaminated Media: Stream Quantities for Selected Management Activities

Description:

This report displays waste and/or contaminated media (e.g., groundwater) quantities at a selected DOE site or sites associated with (a) waste addition (i.e., newly generated waste, waste derived from other processes, or waste received from another site), (b) waste disposition (i.e., treatment or disposal), or (c) waste in inventory (i.e., storage). The report identifies waste and contaminated media quantities as either actual or projected. Quantities are aggregated over the range of years selected by the user and presented by waste type. The user may select particular states, sites, and DOE programs, and the report groups data by selected states and sites. Because much of the quantity data includes groundwater and wastewater, the user may view quantities where these media are either included or excluded from totals.

The user may select to report on:

- One or more states or Operations offices
- One or more DOE sites
- One or more DOE Generating Programs
- A range of years
- One Management Activity
- Included or excluded groundwater/wastewater quantities

Applicable Records:

RAD-7: All waste stream records where T_E_Waste_Stream_Header attribute E_WSH_in_situ_ stream = N, where attribute E_WSH_waste_type_code is NOT equal to "SNF," and where attribute E_WSH_ex_situ_stream = N. In addition, attribute E_WSH_Unit_Name is NOT = "# of tanks" or "number of items." Waste streams that have a value in the E_WSH_Parent_WS_Code field of the T_E_Waste_Stream_Header table will be excluded

CM-7: All waste stream records where T_E_Waste_Stream_Header attribute E_WSH_in_situ_ stream" = N, where attribute "waste_type_code" is NOT equal to "SNF," and where attribute E_WSH_ex_situ_stream = Y. In addition, attribute E_WSH_Unit_Name is NOT = "# of tanks" or "number of items." Waste streams that have a value in the E_WSH_Parent_WS_Code field of the T_E_Waste_Stream_Header table will be excluded.

RAD/CM-7: All waste stream records where T_E_Waste_Stream_Header attribute E_WSH_in_situ_ stream = N, and where attribute E_WSH_waste_type_code is NOT equal to "SNF." In addition, attribute E_WSH_Unit_Name" is NOT = "# of tanks" or "number of items." Waste streams that have a value in the E_WSH_Parent_WS_Code field of the T_E_Waste_Stream_Header table will be excluded.

Applicable Tables:

T_E_Waste_Stream_Header, T_E_WS_Activity_Header, T_E_WS_Activity Annual, tx_Src_WS_Activity, tx_Disp_WS_Activity

Special Calculations/Formatting:

- Quantity data should be presented by rounding numbers to 3 significant digits to the right of the decimal. Add a footnote that explains if values are lower than .001 (rounded), they will appear as zero on the report. Totals should add the values first and then round the result to 3 significant digits to the right of the decimal.

- Read the T_E_Waste_Stream_Header table to identify all waste streams that match the selected generating program.

- Read the T_E_WS_Activity_Header table (source_T_E_WS_Activity or disp_T_E_WS_Activity) to identify all waste streams that match the selected activity.

- Read E_WSH_Waste_Type_Code field in the T_E_Waste_Stream_Header to determine the waste type. For the “Other” waste column in the report , E_WSH_Waste_Type_Code is = to “11e2" or “UNSP.”

- Sum each activity annual value (E_WSAA_source_FYXXX or E_WSAA_disp_FYXXX) for the selected years for each waste type and site. For HLW, read E_WSH_Unit_Name in the T_E_Waste_Stream_Header table and only include those HLW streams where quantities are reported in cubic meters. If the activity selected are "Additions" (i.e. "New", "Process Outputs" or "Off-Site Receipt") then E_WSAA_source_FYXXXX values should be summed. For all other activities, the E_WSAA_disp_FYXXXX values should be summed.

- For HLW-Vitrified Column, sum each activity annual value (E_WSAA_source_FYXXX or E_WSAA_disp_FYXXX)for the selected years where the waste type = HLW and quantities are reported in # of High Level Waste Canisters in E_WSH_Unit_Name field of the T_E_Waste_Stream_Header table. If the activities selected are “Additions" (i.e. "New", "Process Outputs" or "Off-Site Receipt") then E_WSAA_source_FYXXXX values should be summed. For all other activities, E_WSAA_disp_FYXXXX values should be summed.

Record Selection:

1. Reporting Period: To identify the data set they are working with - user can only select 1 item (Not currently implemented).
2. State or Operations Office: User should have option of going either picking a state or picking an operations office - user can select one, many or all items.
3. Site: List should include only those sites that are part of the selected state or operations office.
4. Generating Program: List includes, EM, DP, SC, NE - user can select one, many or all items.
5. Year Range: List includes all years in the life cycle (i.e. 1999 through 2010 in 1 year increments, 2011 through 2070 in five year increments). User can select start and end years to establish the range OR a selection choice for "All Years - including Non-Annualized." When the user selects

this option, the report will display data for all years (and year ranges), including non-annualized quantity data.

6. Activity: User may select one activities. List includes:

   – Additions: *New, Process Outputs, Receipts
   – Treatment: On-Site, Off-Site, TBD-Site (Activity Category = TRT. On-site is where reporting geo site is the same as the disposition geo site, Off-site is where the reporting geo site is different from the disposition geo site but not equal to sites with site category of TBD. TBD-site is where site category of disp geo site is TBD).
   – Disposal: On-Site, Off-Site, TBD-Site (Activity Category = DISP. On-site is where reporting geo site is the same as the disposition geo site, Off-site is where the reporting geo site is different from the disposition geo site but not equal to sites with site category of TBD. TBD-site is where site category of disp geo site is TBD).
   – TBD Dispositions (Activity Category = TBD).
   – Other (All other Activity Categories relevant to media/waste)

7. Physical Form: User will have the option of selecting one individual item from a list of Matrix Parameter Category (MPC) Codes (from txMPC_Code table) OR may select one of the following groupings:

   – "Groundwater/Wastewater Only": Include MPC Codes L1100 (Wastewaters), L1300 (Ground/Surface Waters)
   – "No Groundwater/Wastewater": Include all MPC codes EXCEPT L1100 and L1300.
   – "Groundwater/Wastewater Included": Include all MPC Codes

- The selection criteria for the user to pick a year or range of years needs to clearly identify what years are "Actual" data (current year and back), and what are "Projected Data" (greater than current year).

- Quantities presented in the report should include waste streams associated with the selected MPC or MPC groups. The report should not split out or group data by MPC codes.

*For the Radioactive Waste report, if the user selects the "New" activity, waste streams with an activity_category_code = "GEN" should be included. For the Contaminated Media report, all waste streams with an activity_category_code = "ERGEN" should be included. For the Combined Radioactive Waste and Ex-Situ Contaminated Media all waste streams with activity codes = “ERGEN”and “GEN” should be included.

Sort and Group:

Sort Order:	**Group Order:**
State or Operations Office	State or Operations Office
Site	Site
Program	Program
Activity	Activity
Year Range	Year Range

Report 8: Annual Quantities for Selected Management Activities

RAD-8:	Radioactive Waste: Annual Quantities for Selected Management Activities
CM-8:	Ex Situ Contaminated Media: Annual Quantities for Selected Management Activities
RAD/CM-8:	Combined Radioactive Waste and Ex-Situ Contaminated Media: Annual Quantities for Selected Management Activities

Description:

This report presents for a particular site and a particular management activity (e.g., additions, treatment, disposal), the annual actual or projected quantities of waste or ex situ contaminated media, summarized by waste type, that correspond to that management activity. The report can be generated for multiple sites and management activities. In addition, the report can be generated to include or exclude groundwater or wastewater quantities

The user may select to report on:

- One or more states or Operations offices
- One or more DOE sites
- One or more management activities
- One or more DOE generating programs
- Included or excluded groundwater/wastewater quantities

Applicable Records:

RAD-8: All waste stream records where T_E_Waste_Stream_Header attribute E_WSH__In_Situ_ Stream = N, where attribute E_WSH_waste_type_name is NOT equal to "SNF," and where attribute E_WSH_Ex_Situ_Stream = N. In addition, attribute E_WSH_Unit_Name is NOT = number of tanks (NT) or number of items (NI). Waste streams that have a value in the E_WSH_Parent_WS_Code field of T_E_Waste_Stream_Header will be excluded.

CM-8: All waste stream records where T_E_Waste_Stream_Header attribute E_WSH__In_Situ_ Stream = N, where attribute E_WSH_waste_type_name is NOT equal to "SNF," and where attribute E_WSH_Ex_Situ_Stream = Y. In addition, attribute E_WSH_Unit_Name is NOT = number of tanks (NT) or number of items (NI). Waste streams that have a value in the E_WSH_Parent_WS_Code field of T_E_Waste_Stream_Header will be excluded.

RAD/CM-8: All waste stream records where T_E_Waste_Stream_Header attribute E_WSH_waste_type_name is NOT equal to "SNF." In addition, attribute E_WSH_Unit_Name is NOT = number of tanks (NT) or number of items (NI). Waste streams that have a value in the E_WSH_Parent_WS_Code field of T_E_Waste_Stream_Header will be excluded.

Applicable Tables:

T_E_Waste_Stream_Header, txWS_Activity, T_E_WS_Activity_Header, T_E_WS_Activity Annual

Special Calculations/Formatting:

- Quantity data should be presented by rounding numbers to 3 significant digits to the right of the decimal. Add a footnote that explains if values are lower than .001 (rounded), they will appear as zero on the report. Totals should add the values first and then round the result to 3 significant digits to the right of the decimal.

- Read the WasteStreamHeader table to identify all waste streams that match the selected generating program(s).

- Read T_E_WS_Activity_Header to identify all waste streams that match the selected activity (E_WSAH_source_WS_Activity_Code if New, Process Outputs or Receipts is selected; or E_WSAH_disp_WS_Activity_Code if any other activity is selected), AND that match the sites selected (If the activity selected is "New" or "Process Output" or "Off-Site Receipt" than selected site(s) should be interpreted as source sites (i.e. read E_WSAH_source_Geo_Site_Code to match the selected site(s). If any other activity is chosen, selected sites should be interpreted as disposition sites (i.e. read E_WSAH_Disp_Geo_Site_Code to match the selected sites)).

- Read the T_E_WS_Activity_Annual. If the selected activity is a source activity, for each waste stream with the same waste type, sum each activity annual value (E_WSAA_source_FYXXXX) for each year in the range 1998-2010. If the selected activity is a disposition activity, for each waste stream with the same waste type, sum each activity annual value (E_WSAA_disp_FYXXXX) for each year in the range 1998-2010.

- For the Radioactive Waste report, if the user selects the "New" activity, waste streams with an activity_category_code = "GEN" should be included. For the Contaminated Media report, all waste streams with an activity_category_code = "ERGEN" should be included. For the Combined Radioactive Waste and Ex-Situ Contaminated Media all waste streams with activity codes = “ERGEN”and “GEN” should be included.

- For the E_WSAA_source_FYXXXX and E_WSAA_disp_FYXXXX quantities (where XXXX equals a year greater than 2010), sum the fields and add any non-annualized quantities (E_WSAA_Source_Nonannualized or E_WSAA_Disp_nonannualized) for each strum and place in the column “2011-70(P) & Non-annualized.”

- For the HLW row, include only those HLW records where the quantities are in cubic meters.

- For the HLW-Vitrified Row, include only those HLW records where the quantities are in "number of HLW canisters".

Record Selection:

1. Reporting Period: To identify the data set they are working with - user can only select 1 item (Not currently implemented).
2 State or Operations Office: User should have option of either picking a state or picking an operations office - user can select one, many or all items.
3. Site: List should include only those sites that are part of the selected state or operations office.
4. Generating Program: List includes, EM, DP, SC, NE - user can select one, many or all items.

5. Activity: User may select one activity from the list. List includes:

   – Additions: *New, Process Outputs, Receipts
   – Treatment: On-Site, Off-Site, TBD-Site (Activity Category = TRT. On-site is where reporting geo site is the same as the disposition geo site, Off-site is where the reporting geo site is different from the disposition geo site but not equal to sites with site category of TBD. TBD-site is where site category of disp geo site is TBD).
   – Disposal: On-Site, Off-Site, TBD-Site (Activity Category = DISP. On-site is where reporting geo site is the same as the disposition geo site, Off-site is where the reporting geo site is different from the disposition geo site but not equal to sites with site category of TBD. TBD-site is where site category of disp geo site is TBD).
   – TBD Dispositions (Activity Category = TBD).
   – Other (Activity Categories OTHPR, RECY, RRU, NPDES)

- Physical Form: User will have the option of selecting one individual items from a list of Matrix Parameter Category (MPC) Codes (from txMPC_Code table) OR may select one of the following groupings:

  – "Groundwater/Wastewater Only": Include MPC Codes L1100 (Wastewaters), L1300 (Ground/Surface Waters)
  – "No Groundwater/Wastewater": Include all MPC codes EXCEPT L1100 and L1300.
  – "Groundwater/Wastewater Included": Include all MPC Codes

- Quantities presented in the report should include waste streams associated with the selected MPC or MPC groups. The report should not split out or group data by MPC codes.

Sort and Group:

Sort Order:	**Group Order:**
State or Operations Office	State or Operations Office
Site	Site
Program	Program
Activity	Activity
Waste Type	Waste Type

Report 9: Annual Projections for Waste Stream Shipping and Receiving

RAD-9:	Radioactive Waste: Annual Projections for Stream Shipping and Receiving
CM-9:	Contaminated Media: Annual Projections for Ex-Situ Contaminated Media Stream Shipping and Receiving
RAD/CM-9:	Combined Radioactive Waste and Ex-Situ Contaminated Media: Annual Projections for Stream Shipping and Receiving by Receiving Site by Year

Description:

This report shows annual quantities for each waste stream shipped, or planned to be shipped, to user-selected receiving sites for each fiscal year or block of fiscal years through FY 2070. There are seven DOE sites that receive waste: Hanford, Idaho National Environmental Engineering Laboratory, Los Alamos, Oak Ridge, Savannah River, Nevada Test Site, and the Waste Isolation Pilot Plant. Commercial sites also receive DOE waste. If DOE sites plan on shipping waste but have not yet determined which DOE site will receive the waste, these quantities are reported as "To Be Determined (TBD)". Occasionally waste or media will be sent to a DOE site other than those listed above. Although this situation occurs infrequently, a selection is available to select “Other DOE Site” to receive information on quantities sent to DOE sites not listed above.

The user may select to report on:

- Waste Type (e.g. HLW, LLW)
- Receiving Site

Applicable Records:

RAD-9: All waste stream records where WasteStreamHeader attribute "is_insitu_ stream" = N, where attribute "waste_type_code" is NOT equal to "SNF," and where attribute "is_ex-situ_media" = N. In addition, attribute "Unit_Name" is NOT = "# of tanks" or "number of items."

CM-9: All waste stream records where WasteStreamHeader attribute "is_insitu_ stream" = N, where attribute "waste_type_code" is NOT equal to "SNF," and where attribute "is_ex-situ_media" = Y. In addition, attribute "Unit_Name" is NOT = "# of tanks" or "number of items."

RAD/CM-9: All waste stream records where WasteStreamHeader attribute "is_insitu_ stream" = N, and where attribute "waste_type_code" is NOT equal to "SNF." In addition, attribute "Unit_Name" is NOT = "# of tanks" or "number of items."

Applicable Tables:

T_E_WasteStreamHeader, tx_WS_Activity, tx_WasteType, T_E_WS_Activity_Annual, WS_Activity_Header

Special Calculations/Formatting:

- Quantity data should be presented by rounding numbers to 3 significant digits to the right of the decimal. Add a footnote that explains if values are lower than .001 (rounded), they will appear

as zero on the report. Totals should add the values first and then round the result to 3 significant digits to the right of the decimal.

If the receiving site selected is a DOE receiving site:

- For waste streams for the selected receiving site, identify streams for the selected waste type where the source_geo_site_code is different from the geo_site_code in the T_E_WasteStreamHeader (source_geo_site_code is the shipping site).

- Read T_E_WS_Activity_Annual for each waste stream meeting the above criteria and print the Source_FYXXXX (where XXXX equals each year in the lifecycle) for each shipping site.

- Repeat for each waste stream.

If the receiving site selected includes "Commercial:

- For waste streams for the selected receiving site, identify streams for the selected waste type where the Geographic Site Category is of the disp_geo_site_code is "COMM" and the disp_geo_site_code is different from the geo_site_code in the WasteStreamHeader (geo_site _code in the Waste Stream Header table is the shipping site).

- Read T_E_WS_Activity_Annual for each waste stream meeting the above criteria and print the disp_FYXXXX (where XXXX equals each year in the lifecycle) for each shipping site.

- Repeat for each waste stream.

If the receiving site selected includes "To Be Determined":

- For waste streams for the selected receiving site, identify streams for the selected waste type where the Geographic Site Category is of the disp_geo_site_code is "TBD" OR the disp_geo_code is = "DOE", AND the disp_geo_site_code is different from the geo_site_code in the WasteStreamHeader (geo_site _code in the T_E_WasteStreamHeader table is the shipping site).

- Read T_E_WS_Activity_Annual for each waste stream meeting the above criteria and print the disp_FYXXXX (where XXXX equals each year in the lifecycle) for each shipping site.

- Repeat for each waste stream.

If the receiving site selected includes "Other DOE Site":

- For waste streams for the selected receiving site, identify streams for the selected waste type where the disp_geo_site code is NOT = "DOE", and the disp_geo_site_code is different from the geo_site_code in the T_E_WasteStreamHeader (geo_site _code in the T_E_WasteStreamHeader table is the shipping site). Of these records, select the records where (1) the geo_site_category of the disp_geo_site is = "N-DOE" and the disp_geo_site code is NOT EQUAL to "DOE" OR (2) where the s_site_geo_site_category of the disp_geo_site_code is equal to R-DOE AND is not one of the hard-coded sites.

- Read T_E_WS_Activity_Annual for each waste stream meeting the above criteria and print the disp_FYXXXX (where XXXX equals each year in the lifecycle) for each shipping site.
- Repeat for each waste stream
- Shipping Sites within the same state should be grouped together under a “State” label.
- Waste streams for the same shipping site should all be listed together.

Record Selection:

Users may select one, many or all values from the following lists, in order:

1. Reporting Period: To identify the data set they are working with - user can only select 1 item (Not currently implemented).
2. Receiving Site: The receiving site list should only include the following sites:
   - Hanford,
   - Idaho National Environmental Engineering Laboratory
   - Los Alamos
   - Oak Ridge
   - Savannah River
   - Nevada Test Site
   - Waste Isolation Pilot Plant
   - Commercial
   - To Be Determined (TBD)
   - Other DOE Site
3. Waste Type: List includes HLW, HLW-Vitrified*, MLLW, LLW, TRU , and Other(other will include any waste types not specifically listed here). User can select one, many, or all items.

*HLW-Vitrified is not a valid value for the waste type field. If the user selects this, we should show HLW streams where quantity amounts are reported with units of "# of HLW Canisters".

Sorting/Grouping:

Sort Order:	**Group Order:**
Receiving Site	Receiving Site
Waste Type	Waste Type
State	State
Shipping Site	Shipping Site
Stream Name	Stream Name

Report 10: Radioactive Waste and SNF Inventory Quantities

RAD-10: Radioactive Waste and Spent Nuclear Fuel (SNF): Inventory Quantities

Description:

This report shows stream quantities aggregated by state and by site for waste that is, or is projected to be, in inventory (storage) over a user-selected range of years. Quantities are presented for radioactive waste, contaminated media, and spent nuclear fuel and organized by type of wastes. The user may select particular states, sites, and DOE generating programs. Since much of the quantity data includes groundwater and waste water, the user also has the option of viewing quantities where groundwater/wastewater is included or excluded from the totals presented.

The user may select to report on:

- One or more states or Operations offices
- One or more DOE sites
- One or more DOE Generating Programs
- A range of years
- Included or excluded groundwater/wastewater quantities

Applicable Records:

All waste stream records. Waste streams that have a value in the E_WSH_ Parent_WS_Code field of the T_E_Waste_Stream_Header table will be excluded.

Applicable Tables:

T_E_Waste_Stream_Header, T_E_WS_Acitivity_Annual

Special Calculations/Formatting:

- Quantity data should be presented by rounding numbers to 3 significant digits to the right of the decimal. Add a footnote that explains if values are lower than .001 (rounded), they will appear as zero on the report. Totals should add the values first and then round the result to 3 significant digits to the right of the decimal.

- Read the T_E_Waste_Stream_Header table to identify all waste streams that match the selected generating program.

- For the states, sites, programs selected, sum the E_WSAA_inv_FYXXXX (where XXXX equals the last year in the selected year range) volumes from the T_E_WS_Activity_Annual table for each site and waste type combination.

- Read E_WSH_Waste_Type_Code field in the T_E_Waste_Stream_Header to determine the waste type. For the “Other” waste column in the report , sum the volumes for E_WSH_Waste_Type_Code = to “11e2" or “UNSP.”

- For the HLW column,, read E_WSH_Unit_Name in the T_E_Waste_Stream_Header table and only include those HLW streams where quantities are reported in cubic meters.

- For the HLW-Vitrified column, read E_WSH_Unit_Name in the T_E_Waste_Stream_Header table and include only those HLW records where the quantities are reported in "number of HLW canisters".

- If the waste type is not specifically identified as a column in the report, place the summed volumes in the "Other" column.

- The Total row is a sum of all the sites for each waste type (down the column).

Record Selection:

1. Reporting Period: To identify the data set they are working with - user can only select 1 item (Not currently implemented).

2. State or Operations Office: User should have option of going either picking a state or picking an operations office - user can select one, many or all items.

3. Site: List should include only those sites that are part of the selected state or operations office.

4. Generating Program: List includes, EM, DP, SC, NE - user can select one, many or all items.

5. Year Range: List includes all years in the life cycle (i.e. 1999 through 2010 in 1 year increments, 2011 through 2070 in five year increments). User can select a starting year and an ending year to establish a range OR a selection choice for "All Years - including Non-Annualized." When the user selects this option, the report will display data for all years (and year ranges), including non-annualized quantity data.

6. Physical Form: User will have the option of selecting individual one items from a list of Matrix Parameter Category (MPC) Codes (from txMPC_Code table) OR may select one of the following:

   "Groundwater/Wastewater Only": Include MPC Codes L1100 (Wastewaters), L1300 (Ground/Surface Waters)
   "No Groundwater/Wastewater": Include all MPC codes EXCEPT L1100 and L1300.
   "Groundwater/Wastewater Included": Include all MPC Codes

The selection criteria for the user to pick a year or range of years needs to clearly identify what years are "Actual" data (current year and back), and what are "Projected Data" (greater than current year).

Quantities presented in the report should include waste streams associated with the selected MPC or MPC groups. The report should not split out or group data by MPC codes.

Sort and Group:

Sort Order:	**Group Order:**
State	State
Site	Site
Program	Program
Year	Year

Report 11: Disposal Volumes by Disposal Site

RAD-11: Radioactive Waste, Contaminated Media and Spent Nuclear Fuel: Disposal Volumes by Disposal Site

Description:

This report presents actual or projected quantities of radioactive waste, contaminated media, and spent nuclear fuel that were disposed or planned to be disposed at selected site(s). The user can select one or more disposal sites to report actual or projected disposal quantities. Quantities are aggregated for each site shipping the waste (source site) for the years selected by the user, and presented for all waste types (note: Spent Nuclear fuel quantities are reported in Metric Tons of Heavy Metal (MTHM), High Level Waste - Vitrified is report in "Number of HLW Canisters", all other quantities are in cubic meters). The user may also select DOE programs. Since much of the quantity data includes groundwater and waste water, the user also has the option of viewing quantities where groundwater/wastewater is included or excluded from the totals presented.

The user may select to report on:

- One or many states or DOE Operations Offices
- One or many disposal sites
- One or many DOE Programs
- A range of years
- Included or excluded groundwater/wastewater quantities

Applicable Records:

All waste stream records where the T_E_Waste_Stream_Header attribute E_WSH_in_situ_ stream = N. Waste streams that have a value in the E_WSH_Parent_WS_Code field of the T_E_Waste_Stream_Header table will be excluded.

Applicable Tables:

T_E_Waste_Stream_Header, T_E_WS_Activity_Header, T_E_WS_Activity_Annual

Special Calculations/Formatting:

- Quantity data should be presented by rounding numbers to 3 significant digits to the right of the decimal. Add a footnote that explains if values are lower than .001 (rounded), they will appear as zero on the report. Totals should add the values first and then round the result to 3 significant digits to the right of the decimal.

- Read the T_E_Waste_Stream_Header table to identify all waste streams that match the selected DOE program.

- Read the T_E_WS_Activity_Header table to identify all waste streams that match the selected disposal site (E_WSAH_disp_geo_site_code).

- Read E_WSH_Waste_Type_Code field in the T_E_Waste_Stream_Header to determine the waste type. For the “Other” waste column in the report , E_WSH_Waste_Type_Code is = to “11e2" or “UNSP.”

- For each waste stream that matches the selected disposal site, read T_E_Waste_Stream_Header E_WSH_geo_site_code to retrieve the source site (only select waste streams where the E_WSH_geo_site_code does not equal the E_WSAH_disp_site code).

- Read the T_E_WS_Activity_Annual table for the stream activities that match the disposal site and source site and sum the E_WSAA_disp_FYXXXX attributes of the waste stream records with the same waste type codes.

- For the HLW column,, read E_WSH_Unit_Name in the T_E_Waste_Stream_Header table and only include those HLW streams where quantities are reported in cubic meters.

- For the HLW-Vitrified column, read E_WSH_Unit_Name in the T_E_Waste_Stream_Header table and include only those HLW records where the quantities are reported in "number of HLW canisters".

- The Total row represents the sum of all site volumes for each waste type (down the column).

Record Selection:

1. Reporting Period: To identify the data set they are working with - user can only select 1 item (Not currently implemented).
2. State or Operations Office: User should have option of going either picking a state or picking an operations office - user can select one, many or all items.
3. Disposal Site: List should include only those sites that are part of the selected state or operations office.
4. DOE Program: List includes, EM, DP, SC, - user can select one, many or all items.
5. Year Range: List includes all years in the life cycle (i.e. 1999 through 2010 in 1 year increments, 2011 through 2070 in five year increments). User can select start and end date to establish the range of years. There should be a selection choice for "All Years and Non-Annualized Quantities." When the user selects this option, the report will display data for all years (and year ranges), including non-annualized quantity data.
6. Physical Form: User will have the option of selecting one individual item from a list of Matrix Parameter Category (MPC) Codes (from txMPC_Code table) OR may select one of the following groupings:

   "Groundwater/Wastewater Only": Include MPC Codes L1100 (Wastewaters), L1300 (Ground/Surface Waters)
   "No Groundwater/Wastewater": Include all MPC codes EXCEPT L1100 and L1300.
   "Groundwater/Wastewater Included": Include all MPC Codes

- The selection criteria for the user to pick a year or range of years needs to clearly identify what years are "Actual" data (current year and back), and what are "Projected Data" (greater than current year).

- Quantities presented in the report should include waste streams associated with the selected MPC or MPC groups. The report should not split out or group data by MPC codes.

Sort and Group:

Sort Order:	**Group Order:**
State	State
Disposal Site	Disposal Site
Program	Program
Year Range	Year Range
Source Site	Source Site

Report-12: Streams by Isotope

RAD-12: Radioactive Waste and Spent Nuclear Fuel (SNF): Streams by Isotope

Description:

This report shows radioactive waste, contaminated media, and spent nuclear fuel streams that contain user selected isotopes. Data are presented for isotope concentrations, total curies for the stream, DOE program that generated the stream, and other isotopes present.

The user may select to report on:

- One or many DOE sites
- One or many isotopes

Applicable Records:

All waste stream records where the geo_site_code from tWasteStreamHeader table equals [site selected and the isotope(s) equal the isotope names selected by the user. To obtain the appropriate records for the isotope names selected, read T_E_WS_Isotope to determine which waste streams contain the isotope selected by the user (Use the E_WSH_Isotope_ID field then go to the txIsotope lookup table to get the isotope names. The waste streams that contain that isotope (i.e. TE_WSI_WS_Codes where the Isotope Name associated with the E_WSI_Isotope_ID field is the one(s) selected by the user) determines the valid data set for this report. Exclude waste streams where the units associated with the stream (E_WSH_Unit_Name from the T_E_Waste_Stream_Header table) are equal to Number of Items (NI), Number of Tanks (NT) or Number of Canisters (NC).

Applicable Tables:

T_E_Waste_Stream_Header, T_E_WS_Isotope, T_E_WS_Activity_Annual, txIsotope.

Special Calculations/Formatting:

- Quantity data should be presented by rounding numbers to 3 significant digits to the right of the decimal. Add a footnote that explains if values are lower than .001 (rounded), they will appear as zero on the report. Totals should add the values first and then round the result to 3 significant digits to the right of the decimal.

- The stream name should be the E_WSH_Stream_Name field from T_E_Waste_Stream_Header.

- The generating program should be the E_WSH_Gen_Prog_Code from T_E_Waste_Stream_Header.

- For "Stream Type" column in the sample format, set the stream types for each stream based on the following:

  – If the E_WSH_In_Situ_Stream field = N and the E_WSH_Ex_Situ_Stream field are both equal to “N” and the waste type of the stream is not SNF (i.e. E_WSH_Waste_Type_Name is not = “SNF”), the text in the Stream Type column should read “Radioactive Waste”

- If the E_WSH_Ex_Situ_Stream field is equal to “Y” and the waste type of the stream is not SNF (i.e. E_WSH_Waste_Type_Name is not = “SNF”), the text in the Stream Type column should read “Ex Situ Contaminated Media”
- If the E_WSH_In_Situ_Stream field is equal to “Y” and the waste type of the stream is not SNF (i.e. E_WSH_Waste_Type_Name is not = “SNF”), the text in the Stream Type column should read “In Situ Contaminated.
- If the E_WSH_Waste_Type_Name = “SNF”, the text in the Stream Type column should read “Spent Nuclear Fuel”.

- For "Curies" column, use the E_WSH_BT_Total_Activity_CI field from the T_E_Waste_Stream_Header table.

For the "Volume"

- If Stream type is Radioactive Waste, Ex-Situ Media, or SNF read theT_E_WS_Activity _Annual and pull the inv_FYXXX (where XXXX is the most current year where actual numbers are available - for this year its “1998).

- If Stream type is In-Situ, use the E_Contam_Media_Volume field from T_E_Waste_Stream_Header.

For the Concentration columns:

- For each waste stream that contains the user selected isotope, read T_E_WS_Isotope and print the E_WSI_Isotope_Concen_Avg quantity in the “Concentration - Average” column. Print the E_WSI_Isotope_Concen_LL in the “Concentration - Lower Limit” column. Print the E_WSI_Isotope_Concen_UL in the “Concentration - Upper Limit” column

- The unit name of the isotope (E_WSI_Unit_Name in the T_E_WS_Isotope table) should accompany each concentration value.

For the “Other Isotopes” column:

- For each waste stream where the user selected isotope is found, print the names of all other isotopes present in the stream (read T_E_WS_Isotope for each waste stream in the data set), read each E_WSI_Isotope_ID for the stream and use the txIsotope lookup table to obtain the isotope name. That name should appear in the “Other Isotopes” column.

Record Selection:

Users may select one, many or all values from the following lists, in order:

1. Reporting Period: To identify the data set they are working with - user can only select 1 item (Not currently implemented).
2. State or Operations Office: User should have option of either picking a state or picking an operations office - user can select one, many or all items
3. Site: List should include only those sites that are part of the selected state or operations office.
4. Isotope: Valid isotope names from the tx_Isotope look up table OR only those Isotope Names

that are valid for waste streams that occur at the selected Geographic Site (in keeping with our implementation approach to only present valid options).

Sorting/Grouping:

Sort Order:	**Group Order:**
State or Operations Office	State or Operations Office
Site	Site
Isotope	Isotope
Stream	Stream

Report 13: Stream Detail Report

RAD-13:	Radioactive Waste: Stream Characteristics Detail
CM-13:	Contaminated Media: Ex-Situ Contaminated Media Stream Characteristics Detail
RAD/CM-13:	Combined Radioactive Waste and Contaminated Media: Stream Characteristics Detail

Description:

This report shows the major isotopes and contaminants present in each waste stream that is associated with user-selected sites and generating programs. Each waste stream can have many "profiles" which represent a specific percentage of the total stream volume. A profile is used to distinguish parts of the stream that have specific and/or related isotopes and contaminants. This report also presents the total radioactivity for each stream (in curies), the physical form of the stream, and the DOE program responsible for generating the stream.

- One or many States or Operations Offices
- One or many DOE Sites
- One or many DOE Generating Programs
- One or many waste/media types (i.e. HLW, LLW, etc)
- One or many streams

Applicable Records:

RAD-13: All waste stream records where WasteStreamHeader attribute "is_insitu_ stream" = N, where attribute "waste_type_code" is NOT equal to "SNF," and where attribute "is_ex-situ_media" = N. In addition, attribute "Unit_Name" is NOT = "# of tanks" or "number of items."

CM-13: All waste stream records where WasteStreamHeader attribute "is_insitu_ stream" = N, where attribute "waste_type_code" is NOT equal to "SNF," and where attribute "is_ex-situ_media" = Y. In addition, attribute "Unit_Name" is NOT = "# of tanks" or "number of items."

RAD/CM-13: All waste stream records where WasteStreamHeader attribute "is_insitu_ stream" = N, and where attribute "waste_type_code" is NOT equal to "SNF." In addition, attribute "Unit_Name" is NOT = "# of tanks" or "number of items."

Applicable Tables:

T_E_Waste_Stream_Header, T_E_WS_Contam_Profile, T_E_WS_Isotope, T_E_WS_Haz_Contam, tx Isotope, tx Haz Contam

Special Calculations/Formatting:

- Quantity data should be presented by rounding numbers to 3 significant digits to the right of the decimal. Add a footnote that explains if values are lower than .001 (rounded), they will appear as zero on the report. Totals should add the values first and then round the result to 3 significant digits to the right of the decimal.

- Read the T_E_Waste_Stream_Header table to identify all waste streams that match the selected generating program.

- Print the Site Name, Waste Type, and and Stream code in the header for each stream.(E_WSH_Geo_Site_Name, E_WSH_Waste_Type_Name, and EWSH_WS_Code, respectively from T_E_Waste_Stream_Header)>

- In the sub-header for each stream, print the Generating Program, MPC Name, and Total Curies associated with the stream (E_WSH_Gen_Prog_Code, E_WSH_MPC_Name, and E_WSH_BT_Total_Activity_CI respectively from T_E_Waste_Stream_Header).

- Each stream can have many Profiles to report Isotope data. For each stream selected, read the T_E_WS_Contam_Profile table to retrieve Profile name (E_ConP_Profile_Name). The percentage field is the E_ConP_Stream_Pct attribute. For each profile, read T_E_WS_Isotope to retrieve the Isotope_concentration_avg, Isotope_concentration_LL, Isotope_concentration_UL for each Isotope in the profile. Repeat for all profiles for the selected waste stream(s).

- The Isotope Names should be the names of the isotopes associated with the E_WSI_Isotope_ID field from tx_Isotope look up table.

- For each profile, read the T_E_WS_Haz_Contam table to retrieve the HAZ_contaminant_concentration_avg, HAZ_contaminant_concentration_LL, HAZ_contaminant_concentration_UL for each contaminant in the profile. Repeat for all profiles for the selected waste stream(s).

- The contaminant name should be the name associated with the E_WSHC_Haz_Contam_ID from the txHaz Contam lookup table.

- The appropriate units should accompany each concentration (Unit Name from T_E_WS_Haz_Contam or T_E_WS_Isotope).

- If the report is for Ex-Situ Contaminated Media (CM-13), list the Approved Volume (E_WSH_ER_Approved_Volume), Future Volume Average (E_WSH_ER_Future_Volume_Avg), Future Volume Upper Limit (E_WSH_ER_Future_Volume_UL), and Future Volume Lower Limit (E_WSH_ER_Future_Volume_LL) from the Waste Stream Header table. These fields should be listed in the stream header portion of the report.

Record Selection:

Users may select one, many or all values from the following lists, in order:

1. Reporting Period: To identify the data set they are working with - user can only select 1 item. (Not currently implemented.)
2. State or Operations Office: User should have option of either picking a state or picking an operations office - user can select one, many or all items.
3. Site: List should include only those sites that are part of the selected state or operations office.
4. Generating Program: List includes valid program options based on the selection criteria already selected. Valid programs may include EM, DP, SC, NE. User can select one, many or all items.

5. Waste Type: List includes HLW, HLW-Vitrified*, MLLW, LLW, TRU , and Other (other will include any waste types not specifically listed here). User can select one, many, or all items.
6. Stream Name: Lists the names of the streams for each waste type that the user selects.

* HLW-Vitrified is not a valid value for the waste type field. If the user selects this, we should show HLW streams where quantity amounts are reported with units of "# of HLW Canisters".

Sort/Group:

Sort Order:	**Group Order:**
State or Operations Office	State or Operations Office
Site	Site
Program	Program
Waste Type	Waste Type
Stream Name	

Report 14: Shipping and Receiving Summary by Shipping Site

RAD-14:	Radioactive Waste: Shipping and Receiving by Shipping Site
CM-14:	Contaminated Media: Ex-Situ Contaminated Media Shipping and Receiving By Shipping Site
RAD/CM-14:	Combined Radioactive Waste and Contaminated Media: Shipping and Receiving by Shipping Site.

Description:

This report presents for a particular shipping site, the annual quantities of waste (by waste type) shipped, or planned to be shipped from that site to designated receiving sites. The report can be generated for multiple shipping sites. The user may select Shipping Sites by State or Site, and select waste types and Receiving sites to track shipping and receiving activity. If a DOE site plans on shipping waste but has not yet determined which DOE site will receive the waste, these quantities are reported under the "To Be Determined (TBD)" designation. This report presents quantities for each site that is, or is planning to, ship to one of the DOE or commercial receiving sites. The user may select to report on:

- One or More Shipping Sites
- One or more waste/media types (i.e. HLW, LLW, etc)
- One or more Receiving Sites

Applicable Records:

RAD-14: All waste stream records where T_E_Waste_Stream_Header attribute "E_WSH_is_insitu_stream" = N, where attribute "E_WSH_waste_type_code" is NOT equal to "SNF," and where attribute "E_WSH_is_ex-situ_media" = N. In addition, attribute "E_WSH_Unit_Name" is NOT = "# of tanks" or "number of items." Waste streams that have a value in the E-WSH_Parent_WS_Code field of the T_E_Waste_Stream_Header table will be excluded.

CM-14: All waste stream records where T_E_Waste_Stream_Header attribute "E_WSH_is_insitu_stream" = N, where attribute "E_WSH_waste_type_code" " is NOT equal to "SNF," and where attribute "E_WSH_is_ex-situ_media" = Y. In addition, attribute "E_WSH_Unit_Name" is NOT = "# of tanks" or "number of items." Waste streams that have a value in the E-WSH_Parent_WS_Code field of the T_E_Waste_Stream_Header table will be excluded.

RAD/CM-14: All waste stream records where T_E_Waste_Stream_Header attribute "E_WSH_is_insitu_stream"= N, and where attribute "E_WSH_waste_type_code" is NOT equal to "SNF." In addition, attribute "E_WSH_Unit_Name" is NOT = "# of tanks" or "number of items." Waste streams that have a value in the E-WSH_Parent_WS_Code field of the T_E_Waste_Stream_Header table will be excluded.

Applicable Tables:

T_E_Waste_Stream_Header, T_E_WS_Activity, T_E_WS_Activity_Header, T_E_WS_Activity Annual

Special Calculations/Formatting:

- Quantity data should be presented by rounding numbers to 3 significant digits to the right of the decimal. Add a footnote that explains if values are lower than .001 (rounded), they will appear as zero on the report. Totals should add the values first and then round the result to 3 significant digits to the right of the decimal.

- Identify each shipping site in the state selected.

- Identify all waste streams for the applicable shipping -sites that meet the waste type criteria.

- For all waste stream records, read the T_E_Waste_Stream_Header table to obtain all waste streams where the E_WSH_geo_site_code is equal to the selected shipping sites. Then, for each waste stream read the T_E_ WS_Activity_Header table to obtain the E_WSAH_Disp_geo_site_code. If the E_WSAH_Disp_geo_site_code is different than the E_WSH_geo_site_code for the selected shipping site, the E_WSAH_Disp_geo_site_code is a receiving site.

- For each shipping - receiving site pair, read each E_WSAA_disp_FY1998 through 2010 field from the T_E_WS_Activity_Annual table to get a sum quantity for each year. Print this quantity in the appropriate year column. Then read E_WSAA_disp_FY2011 through 2070 fields and sum the values together. Add this value to the E_WSAA_disp_nonannulized amount from the T_E_WS_Activity_Annual table, and place in the last column.

- For year range 1998-2010, the Total row is a summation of all the waste shipped by a site during a specific year. For the 2011-70 and Nonannulized column, the Total field is the sum of the total of the amount of waste shipped during 2011-2070 period and total of Nonannulized waste shipped (Added down the column in the sample format).

Record Selection:

1. Reporting Period: To identify the data set they are working with - user can only select 1 item (Not currently implemented).

2. State or Operations Office: User should have option of either picking a state or picking an operations office - user can select one, many or all items.

3. Shipping Site: List should include only those sites that are part of the selected state or operations office
4. Waste Type: List includes HLW, HLW-Vitrified*, MLLW, LLW, TRU, and Unspecified, 11e2. User can select one, many, or all items.

5. Receiving Sites: Valid list of receiving sites for the selected shipping site and waste type. User can select one, more than one, or all.

* If the HLW-Vitrified waste type is chosen, select HLW records where the units are NC (number of HLW canisters).

Sort and Group:

Sort Order:	**Group Order:**
State	State
Shipping Site	Shipping Site
Waste Type	Waste Type
Receiving Site	

TSD-1: Treatment and Disposal System Detail by Waste Stream

Description:

The report provides the actual or projected annual quantities of waste/media that will undergo treatment or disposal in user selected treatment/disposal system(s). Treatment/Disposal systems are located throughout the DOE complex as well as at commercial locations. The user selects the site(s) of interest (including commercial sites), and then may select from one or more treatment/disposal systems that are operational at that site. The resulting report shows each waste, media or SNF stream that is, or is planned to be, sent to the treatment/disposal systems, and the year in which the treatment has or is expected to occur.

The user may select to report on:

- One or more sites
- One or more DOE Managing Programs
- One or more Treatment/Disposal Systems

Applicable Records:

All waste stream records where the T_E_Waste_Stream_Header attribute E_WSH_In_Situ_Stream = N, and where attribute E_WSH_Unit_Name is NOT = "# of tanks" or "number of items."

Applicable Tables:

T_E_Waste_Stream_Header, T_E_WS_Activity_Header, T_E_WS_Activity_Annual, T_E_Facility, tx_Facility_Technology

Special Calculations/Formatting:

- The sites listed should be a list of the T_E_Fac_Geo_Site_Name fields as they appear in the T_E_Facility table.

- For each T_E_Fac_Geo_Site_Name selected, read the T_E_Facility table to identify all Treatment/Disposal System Names for the site(s) selected and list those as a selection list.

- The user may then pick one or more TSD Systems from this list.

- For each TSD system that is selected, read T_E_Waste_Stream_Activity_Header to obtain waste streams that utilize the selected TSD system (where disp_facility_id is equal to T_E_Facility_ID for the TSD system names selected).

- On the header of the report, include the Technology associated with the TSD system (E_Fac_Technology Name from the T_E_Facility table).

For sites selected whose site category is RDOE (S_Site_Geo_Site_Category = RDOE) , use the following instructions:

- For each waste stream, read T_E_Waste_Stream_Header to obtain the stream name and the waste type. Filter out all streams where the E_WSH_geo_site_code in the T_E_Waste_Stream_Header table is not equal to the E_WSAH_disp_geo_site code in

T_E_WS_Activity_Header. In other words, the only records we want here are those waste streams that are coming from the site selected into the TSD system. We do NOT want records where other sites are reporting waste streams going to the TSD system.

- Read T_E_WS_Activity_Annual and get the E_WSAA_disp_FYXXXX quantities (where XXXX is equals each year in the life cycle of the waste stream that is not 0 or null) for the waste streams that meet the above criteria and list the volumes for those years.

If the user selects a site that does NOT have a category of "RDOE", use the following instructions:

- For each waste stream, read T_E_Waste_Stream_Header to obtain the stream name and the waste type. Read the E_WSAA_disp_FYXXXX (where XXXX is equals each year in the life cycle of the waste stream that is not 0 or null) from the WS_Activity_Annual table and list the volumes for those years.

Record Selection:

Users may select one, many or all values from the following lists, in order:

1. Reporting Period: To identify the data set they are working with - user can only select 1 item (Not currently implemented).
2. Site: List should be all T_E_Fac_Geo_Site_Names from the T_E_Facility table. User can select one or more sites.
3. Generating Program: List includes valid program options based on the selection criteria already selected. Valid programs may include EM, DP, SC, NE. User can select one, many or all items.
4. TSD System Name: List should include only those TSD systems that are found at the selected site and, managed by the selected DOE program(s). User may select one or many items.

Sort and Group:

Sort Order:	**Group Order:**
Site	Site
Program	Program
TSD System	TSD System
Stream Name	

Report CM-10: In-Situ Contaminated Media Report

CM-10: Contaminated Media: In-Situ Contaminated Media Report

Description:

This report displays data for in-situ contaminated media. In-situ is Latin for "in place." In-situ cleanup management activities address contaminated environmental media without excavation through strategies that isolate and stop any further spread into the surrounding environment.

This report provides data at the lowest level of detail available in the database. Data is provided at the "stream" and at the "profile" levels. A "stream" in this database is defined as a group of materials, media, or wastes having similar origins or management requirements (i.e. disposition path). A "profile" is defined as a group of elements of a waste/media/spent nuclear fuel stream that have similar isotopes and/or hazardous contaminants. A profile is the lowest-level of categorization of parts of a stream, or a "sub-stream." At the profile level, this report displays the concentrations of isotopes and contaminants that make up each stream. This report also displays detailed information about in-situ contaminated media streams including the source and destination sites, management activities, and treatment/disposal (TSD) systems.

The user may report on:

- One or more states or Operations Offices
- One or more DOE sites
- One or more DOE generating programs
- One or more waste types
- Included or excluded groundwater/wastewater quantities

Applicable Records:

All waste stream records where T_E_Waste_Stream_Header attribute E_WSH_in_situ_ stream = Y

Applicable Tables:

T_E_Waste_Stream_Header, T_E_WS_Isotope, tx_HAZ_Contaminant, T_E_WS_Activity_Header, tx_Src_WS_Activity, tx_Disp_WS_Activity T_E_WS_Contam_Profile

Special Calculations/Formatting:

- Quantity data should be presented by rounding numbers to 3 significant digits to the right of the decimal. Add a footnote that explains if values are lower than .001 (rounded), they will appear as zero on the report. Totals should add the values first and then round the result to 3 significant digits to the right of the decimal.

- Read the T_E_Waste_Stream_Header table to identify all waste streams that match the selected generating program.
- For the "Estimated Volume," take the E_WSH_Contam_Media_Volume from the T_E_Waste_Stream_Header table.
- For the "Lower Limit Volume", take the E_WSH_Contam_Media_Volume_LL from the T_E_Waste_Stream_Header table.
- For the "Upper Limit Volume" take the E_WSH_Contam_Media_Volume_UL from the T_E_Waste_Stream_Header table.
- For "Source Site," take the E_WSAH_ source_geo_site_code from the T_E_WS_Activity_Header.
- For "Destination Site," take the E_WSH_disp_geo_site_code from the T_E_Waste_Stream_Header table.
- For the Source Site "Activity," take the WS_activity_name field from the tx_Src_WS_Activity table.
- For the Destination Site "Activity," take the WS_activity_name field from the tx_Disp_WS_Activity table.
- For "MPC Name," take the E_WSH_MPC_name from the T_E_Waste_Stream_Header table.
- For "Total Curies", take the E_WSH_BT_Total_Activity_Ci from the T_E_Waste_Stream_Header table.
- For "Approved Volume", take the E_WSH_ER_Approved_Volume from the T_E_Waste_Stream_Header.
- For "Future Volume-Avg", take the E_WSH_ER_Future_Volume_Avg from the T_E_Waste_Stream_Header.
- For "Future Volume Lower Limit", take the E_WSH_ER_Future_Volume_LL from the T_E_Waste_Stream_Header.
- For "Future Volume Upper Limit", take the E_WSH_ER_Future_Volume_UL from the T_E_Waste_Stream_Header.
- For each stream, take every "Profile Name" record from the T_E_WS_Contaminant_Profile table. "%Vol" is the E_ConP_Stream_Pct field from T_E_WS_Contaminant Profile table.
- For each profile, list Isotope information from the T_E_WS_Isotope table and Contaminant information from tx_WS_Haz_Contaminant table. Group Isotope and Contaminant information by "Profile Name."

Record Selection:

Users may select one, many or all values from the following lists, in order:

1. Reporting Period: To identify the data set they are working with - user can only select 1 item (Not currently implemented).

2 State or Operations Office: User should have option of going either picking a state or picking an operations office - user can select one, many or all items

3. Site: List should include only those sites that are part of the selected state or operations office.

4. Generating Program: List includes, EM and SC - user can select one, many or all items.

5. Waste Type: List includes MLLW, LLW, TRU , 11e(2) and Unspecified.

6. Physical Form: User will have the option of selecting one individual item from a list of Matrix Parameter Category (MPC) Codes (from tx_MPC_Code table) OR may select one of the following groupings:

   "Groundwater/Wastewater Only": Include MPC Codes L1100 (Wastewaters), L1300 (Ground/Surface Waters)

   "No Groundwater/Wastewater": Include all MPC codes EXCEPT L1100 and L1300.

   "Groundwater/Wastewater Included": Include all MPC Codes.

Quantities presented in the report should include waste streams associated with the selected MPC or MPC groups. The report should not split out or group data by MPC codes.

Sorting/Grouping:

Sort Order:	**Group Order:**
State or Operations Office	State or Operations Office
Site	Site
Program	Program
Waste Type	Waste Type
Stream	Stream
Profile	Profile
Isotopes	Isotopes
Contaminants	Contaminants

4.2.1.2 Facility Reports

Report 1: Facility Detail Report by Site

FAC-1: Facilities: Detail Report by Site

Description:

This report provides data from the Facilities Information Management System (FIMS), the DOE's corporate real property database. For each facility at a user-selected site, the report shows whether the facilities are contaminated and the type of contamination present (i.e., radiological, chemical, or both). The facility status (i.e., operational, standby) and facility size (approximate square footage) are also shown, as well as excess information about the facilities (if the facility was excessed), including the excess year, when applicable. The report can be generated for multiple sites.

The user may select to report on:

- One or more states
- One or more sites
- One facility status categories
- One or more DOE managing programs

Applicable Records:

All facility records

Applicable Tables:

T_S_STATE, T_S_SITE, T_F_PROPERTY, T_F_STORED_NM, T_F_AREA

Special Calculations/Formatting:

- Numerical data should be presented by rounding numbers to the nearest whole number. A footnote should indicate that quantities less than 1 (as rounded) will appear as zero on the report. Totals should add the values first and then round the result to the nearest whole number.
- The record set is identified by the following selection criteria:
  - "State Name" is the S_STATE_NAME field from the T_S_STATE table.
  - "Site Name"is the S_SITE_NAME field from the T_S_SITE table.
  - "Facility Status" is the F_PROP_Excess_Ind from the T_F_PROPERTY table.

- "Managing Program" is the F_PROP_MAN_PROG_CODE field from the T_F_PROPERTY table.

- For the selected states(s), site(s), facility status category, and program(s), list the following information:

  - "Area Name" is the F_AREA_NAME field from the T_F_AREA table.
  - "Facility Name" is the is the F_PROP_NAME field from the T_F_PROPERTY table.
  - "Facility Type" is the F_PROP_TYPE field from the T_F_PROPERTY table.
  - "Facility Status" is the F_PROP_BLD_CMST_DESC field from the T_F_PROPERTY table. The T_F_PROP_BLD_CMST_DESC values should be listed in the report as the following:

    1 - Operating

    2 - Operational Standby -

    3 - Shutdown Pending Transfer

    4 - Shutdown Pending D&D

    5 - D&D in Progress

  - If the facility has a F_Prop_Type = B, then the "Facility Size" is the F_PROP_BLD_GROSS_SQ_FT field from the T_F_PROPERTY table. Place the words "Square Feet" next to the quantity in this column.
  - If the facility has F_Prop_Type other than a "B" (e.g. "S" or "T") the then "Facility Size"field should pull the F_Prop_OSF_Pri_Qty field from the T_F_PROPERTY table for the value, and the the F_Prop_OSF_Dimn_Desc field for the units.
  - "Facility Excessed?" is the F_PROP_EXCESS_IND field from the T_F_PROPERTY table.
  - "Excess Year" is the F_PROP_EXCESS_YEAR field from the T_F_PROPERTY table.
  - "Contamination Type" is the F_PROP_CONTAM_NAME field from the T_F_PROPERTY table. The F_PROP_CONTAM_NAME values should be listed in the report as the following:

    N: No Contamination

    R: Radiological Contamination

    C: Chemical Contamination

    B: Both Radiological and Chemical Contamination

Record Selection:

1. Reporting Period: To identify the data set they are working with - user can only select 1 item (Not currently implemented).

2. State or Operations Office: User should have option of either picking a state or picking an operations office - user can select one, many or all items.
3. Site: List should include only those sites that are part of the selected state or operations office.
4. Excess Facility Category: List should include only those categories that are valid for the selected state and site. Only one category can be selected.
5. Managing Program: List includes: EM, DP, SC, NE - user can select one, many or all items. List should include only those managing programs that are valid for the selected site(s) and Excess Facility Category.

Sort and Group:

Sort Order:	**Group Order:**
State or Operations Office	State or Operations Office
Site	Site
Program	Program
Area	Area

Report 2: Facility Summary Report by Site

FAC-2: Facility Summary Report by Site

Description:

This report provides data from the Facilities Information Management System (FIMS), the DOE's corporate real property database. For each user-selected site, this report summarizes the status of contamination and stored nuclear materials/waste at DOE facilities. A count of facilities for each status (i.e. operating, standby, etc), facility contamination type (i.e., radiological, chemical, both), and stored nuclear materials/waste type is provided. The report can be generated for multiple sites.

The user may select to report on:

- One or more states
- One or more sites
- One or more DOE Managing Programs

Applicable Records:

All facility records

Applicable Tables:

T_S_STATE, T_S_SITE, T_F_PROPERTY, T_F_STORED_NM.

Special Calculations/Formatting:

- The record set is identified by the following selection criteria:
  - "State Name" is the S_STATE_NAME field from the T_S_STATE table.
  - "Site Name"is the S_SITE_NAME field from the T_S_SITE table.
  - "Managing Program" is the F_PROP_MAN_PROG_CODE field from the T_F_PROPERTY table.
- Report consists of three sub-tables:
  - For the first sub-table, read each record in T_F_PROPERTY. The "Facility Status" table is a list of all the valid values from the T_F_PROP_BLD_CMST_DESC field of the T_F_PROPERTY

table. The T_F_PROP_BLD_CMST_DESC values correspond to the following types of "Facility Status":

1 - Operating

2 - Operational Standby -

3 - Shutdown Pending Transfer

4 - Shutdown Pending D&D

5 - D&D in Progress

Null: No Information Provided

Count the facilities for the site that have the same status value and provide the count in the sub-table by status. Repeat for each valid value for each Facility Status. If the status field is blank, count the record in the status category of "No Information Provided".

– For the second sub-table, the "Facility Contaminant Type" column is a list of all the valid values from the F_PROP_CONTAM_NAME field of the T_F_PROPERTY table. The F_PROP_CONTAM_NAME values correspond to the following Facility Contaminant Types:

N: No Contamination

R: Radiological Contamination

C: Chemical Contamination

B: Both Radiological and Chemical Contamination

Null: No Information Provided

Count the facilities for the site that have the same Property Contaminant Type and provide the count in the sub-table. Repeat for each valid value for Property Contaminant. If the contamination field is blank, count the record in the category "No Information Provided".

– For the third sub-table, the "Type Of Nuclear Material/Waste Present in Facility" column is a list of all the valid values from the F_SNM_HAZ_NAME field of the T_F_STORED_NM table. The "Number of Facilities" column is a direct pull of F_SNM_NMW_FACS from the T_F_STORED_NM table.

Record Selection:

1. Reporting Period: To identify the data set they are working with - user can only select 1 item (Not currently implemented).
2 State or Operations Office: User should have option of either picking a state or picking an operations office - user can select one, many or all items.
3 Site: List should include only those sites that are part of the selected state or operations office.
4 Managing Program: List includes: EM, DP, SC, NE - user can select one, many or all items. List should include only those managing programs that are valid for the selected site(s).

Sort and Group:

Sort Order:	**Group Order:**
State or Operations Office	State or Operations Office
Site	Site
Program	Program

Report 3: Facilities by Contamination Type

FAC-3: Facilities By Contamination Type

Description:

This report provides data from the Facilities Information Management System (FIMS), the DOE's corporate real property database. This report shows facilities, by site, for user-selected contamination types (i.e,. radiological, chemical, both, none). Information on facility status, current use, and historical use is provided. The report can be generated for multiple sites and multiple contamination types.

The user may select to report on:

- One or more states or Operations Offices
- One or more sites
- One or more DOE Managing Programs
- One or more contamination types

Applicable Records:

All facility records

Applicable Tables

T_S_STATE, T_S_SITE, T_F_PROPERTY, T_F_STORED_NM.

Special Calculations/Formatting:

- The record set is identified by the following selection criteria:
  - "State Name" is the S_STATE_NAME field from the T_S_STATE table.
  - "Site Name"is the S_SITE_NAME field from the T_S_SITE table.
  - "Managing Program" is the F_PROP_MAN_PROG_CODE field from the T_F_PROPERTY table.
  - "Property Contaminant" is the F_PROP_CONTAM_NAME field from the T_F_STORED_NM table.

- For the selected states(s), site(s), program(s), and property contaminant(s), list the following information:
  - "Facility Name" is the F_PROP_NAME field from the T_F_PROPERTY table.
  - "Facility Status"is the F_PROP_BLD_CMST_DESC field from the T_F_PROPERTY table.
  - "Current Use" is the F_PROP_USCD_DESC field from the T_F_PROPERTY table.
  - "Historical Use" is the F_PROP_BLD_HISTORY_USE field from the T_F_PROPERTY table.
  -

Record Selection:

1. Reporting Period: To identify the data set they are working with - user can only select 1 item (Not currently implemented).
2. State or Operations Office: User should have option of either picking a state or picking an operations office - user can select one, many or all items.
3 Site: List should include only those sites that are part of the selected state or operations office.
4 Managing Program: List includes: EM, DP, SC, NE - user can select one, many or all items. List should include only those managing programs that are valid for the selected site(s).
5 Contamination Type: List includes: No Contamination, Radiological Contamination, Chemical Contamination, Both Radiological and Chemical Contamination. Users can only select one item from the list. List should only include those contamination types that are valid for the selected site(s) and program(s).

Sort and Group:

Sort Order:	**Group Order:**
State or Operations Office	State or Operations Office
Site	Site
Program	Program
Contamination Type	Contamination Type

4.2.1.3 Non-Radioactive Hazardous Waste Reports

Report 1: Non-Radioactive Hazardous Waste

NRAD-1: Non-Radioactive Hazardous Waste: Non-Radioactive Hazardous Waste

Description:

This report shows non-radioactive hazardous waste (excluding sanitary waste) as reported through DOE's Pollution Prevention Program. This data is collected to support the Annual Report of Waste Generation and Pollution Prevention Progress. The report shows volumes of non-radioactive hazardous waste reported by DOE sites for the current reporting year and two years prior. Volumes are reported as routine and non-routine waste categorized under the Toxic Substances Control Act (TSCA), Resource Conservation and Recovery Act (RCRA), and state-specific reportable waste. The report can be generated for multiple sites.

The user may select to report on:

- One or more states or Operations Offices
- One or more sites

Applicable Records:

All non-radioactive hazardous (non-sanitary) waste records in T_W_Waste_Gen_Rpt table**.**

Applicable Tables:

T_W_Waste_Gen_Rpt

Special Calculations/Formatting:

- The sites available for selection should be those sites corresponding to the W_WGR_Site_Num field.
- Numerical data should be presented by rounding numbers to 2 significant digits to the right of the decimal. A footnote should indicate that quantities less than .01 (as rounded) will appear as zero on the report. Totals should add the values first and then round the result to 2 significant digits to the right of the decimal.
- The report should list the most current year waste amounts for the current year (data set year), plus one year prior to the current reporting year, if applicable.
- Multiple sites can be selected, group data together for each site.

- The following fields correspond to the labels on the sample report:

  Non-Routine RCRA Waste: W_WGR_NonRoutine_RCRA

  Non-Routine State Waste: W_WGR_NonRoutine_State

  Non-Routine TSCA Waste: W_WGR_NonRoutine_TSCA

  Routine RCRA Waste: W_WGR_Routine_RCRA

  Routine State Waste: W_WGR_Routine_State

  Rountine TSCA Waste: W_WGR_Routine_TSCA

- The "Total" field is the sum of the different reported waste amounts for each reporting year by site (summed down the column).

Record Selection:

1. Reporting Period: To identify the data set they are working with - user can only select 1 item (Not currently implemented).
2. State or Operations Office: User should have option of going either picking a state or picking an operations office - user can select one, many or all items.
3. Site: List should include those sites in the State or Operations Ofrice that have Waste Generation records.

Sort and Group:

Sort Order:	**Group Order:**
State or Operations Office	State or Operations Office
Site	Site

Report 2: Non-Radioactive Sanitary Waste

NRAD-2: Non-Radioactive Waste: Non-Radioactive Sanitary Waste

Description:

This report shows non-radioactive sanitary waste as reported through DOE's Pollution Prevention Program. This data is collected to support the Annual Report of Waste Generation and Pollution Prevention Progress. The report shows volumes of non-radioactive sanitary waste reported by DOE sites for the current reporting year and two years prior. Volumes are reported as routine and non-routine waste. The report can be generated for multiple sites.

The user may select to report on:

- One or more states or Operations Offices
- One or more sites

Applicable Records*:*

All non-radioactive hazardous sanitary waste records in T_W_Waste_Gen_Rpt**.**

Applicable Tables:

T_W_Waste_Gen_Rpt.

Special Calculations/Formatting:

- The sites available for selection should be those sites corresponding to the W_WGR_Site_Num field.

- Numerical data should be presented by rounding numbers to 2 significant digits to the right of the decimal. A footnote should indicate that quantities less than .01 (as rounded) will appear as zero on the report. Totals should add the values first and then round the result to 2 significant digits to the right of the decimal.

- The report should list the most current year waste amounts for the current year (data set year), plus one years prior to the current reporting year, if applicable.

- Multiple sites can be selected, group data together for each site.

- The following fields correspond to the labels on the sample report:

  Non-Routine Sanitary Waste: W_WGR_NonRoutine_Sanitary

  Routine Sanitary Waste: W_WGR_Routine_Sanitary

- The "Total" field is the sum of the different reported waste amounts for each reporting year by site (summed down the column).

Record Selection:

- Reporting Period: To identify the data set they are working with - user can only select 1 item (Not currently implemented).
- State or Operations Office: User should have option of going either picking a state or picking an operations office - user can select one, many or all items.
- Site: List should include only those sites in the State or Operations Office that have Waste Generation Records.

Sort and Group:

Sort Order:	**Group Order:**
State or Operations Office	State or Operations Office
Site	Site

4.2.1.4 Toxic Release Inventory Reports

Report 1: TRI Reporting Data by Reporting Year

TRI-1: Toxic Release Inventory (TRI): Reporting Data by Reporting Year

Description:

This report shows reported quantities of chemicals released or transferred at or from user-selected sites as reported by DOE to the EPA Toxic Release Inventory (TRI) program. If releases occur beyond a certain threshold set by the EPA program, sites are required to report these releases through submission of EPA Form R. The data presented are from Form R, Part II Section 5 (Quantity of the Toxic Chemical Entering Each Environmental Medium Onsite), Section 6 (Transfers of the Toxic Chemical in Wastes to Off-site Locations) and Section 8 (Source Reduction and Recycling Activities). For each chemical at a site, volumes of off-site transfers, off-site releases, and waste management activities are shown.

The user may select to report on:

- One or more states or Operations Offices
- One or more sites

Applicable Records:

All records in T_T_TRI

Applicable Tables:

T_T_TRI

Special Calculations/Formatting:

- Sites available for selection should be those site names that correspond to the value in T_TRI_Fac_Name.

- Numerical data should be presented by rounding numbers to the nearest whole number. A footnote should indicate that quantities less than1(as rounded) will appear as zero on the report.

- The following fields should be listed for each State, Site, Year and every chemical present (T_TRI_Chem_Name):

  Total Other Transfers: T_TRI_OSX_Tot_Xfer_Other

  Total Transfers to Publicly Owner Treatment Works: T_TRI_OSX_Xfer_POTWs

  Fugitive Non-Point Air Emissions: T_TRI_CROS_Fugitive_Air_Emis

  Stack or Point Air Emissions: T_TRI_CROS_Stack_Air_Emis

  Discharge to Receiving Streams or Water Bodies: T_TRI_CROS_Discharge_Rcv_Strm

  On-Site Underground Injection: T_TRI_CROS_On_Site_UGrnd_Inj

  On-Site Land Disposal: T_TRI_CROS_Land_Release

  Quantity Released EPCRA: T_TRI_RWM_Qty_Rel_EPCRA

  Quantity On-Site Energy Recovery: T_TRI_RWM_Qty_On_Site_E_Recov

  Quantity Offsite Energy Recorver: T_TRI_RWM_Qty_Off_Site_E_Recov

  Quantity Recycled Onsite: T_TRI_RWM_Qty_On_Site_Recycle

  Quantity Recycled Offsite: T_TRI_RWM_Qty_Off_Site_Recycle

  Quantity Treated Onsite: T_TRI_RWM_Qty_On_Site_Treat

  Quantity Treated Offsite: T_TRI_RWM_Qty_Off_Site_Treat

  Quantity Released Non Production: T_TRI_RWM_Qty_Rel_Non_Prod

Record Selection:

1. Reporting Period: To identify the data set year - user can only select 1 item (Not currently implemented).
2. State or Operations Office: User should have option of either picking a state or picking an operations office - user can select one, many or all items.
3. Site: List should include only those sites for the reporting year, within the selected state(s) or operations office(s), that have TRI records.

Sort and Group:

Sort Order:	**Group Order:**
Reporting Year	Reporting Year
State or Ops Office	State or Ops Office
Site	Site
Chemical	Chemical

Report 2: TRI Reporting Data for Selected Chemicals

TRI-2: Toxic Release Inventory (TRI): Reporting Data for Selected Chemicals

Description:

This report shows reported quantities for user-selected chemicals by year as reported by DOE to the EPA Toxic Release Inventory (TRI) program. If releases occur beyond a certain threshold set by the EPA program, sites are required to report these releases through submission of EPA Form R. The data presented are from Form R, Part II Section 5 (Quantity of the Toxic Chemical Entering Each Environmental Medium Onsite), Section 6 (Transfers of the Toxic Chemical in Wastes to Off-site Locations) and Section 8 (Source Reduction and Recycling Activities). For each year, volumes of off-site transfers, off-site releases, and waste management activities of user-selected chemicals are shown.

The user may select to report on:

- One or more states or Operations Offices
- One or more sites
- One or more Chemical Names

Applicable Records:

All records in T_T_TRI

Applicable Tables:

T_T_TRI

Special Calculations/Formatting:

- The user may select one or more chemicals for the selected site(s). List of chemicals provided should be those chemical names (T_TRI_Chem_Name) that are valid for the site selected.
- For each site and chemical selected**,** list the quantities for every reporting year available for that chemical in the database.
- Numerical data should be presented by rounding numbers to the nearest whole number. A footnote should indicate that quantities less than1(as rounded) will appear as zero on the report.

- The following fields should be listed for each Site and Chemical, for every year present (data set year):

  Total Other Transfers: T_TRI_OSX_Tot_Xfer_Other

  Total Transfers to Publicly Owner Treatment Works: T_TRI_OSX_Xfer_POTWs

  Fugitive Non-Point Air Emissions: T_TRI_CROS_Fugitive_Air_Emis

  Stack or Point Air Emissions: T_TRI_CROS_Stack_Air_Emis

  Discharge to Receiving Streams or Water Bodies: T_TRI_CROS_Discharge_Rcv_Strm

  On-Site Underground Injection: T_TRI_CROS_On_Site_UGrnd_Inj

  On-Site Land Disposal: T_TRI_CROS_Land_Release

  Quantity Released EPCRA: T_TRI_RWM_Qty_Rel_EPCRA

  Quantity On-Site Energy Recovery: T_TRI_RWM_Qty_On_Site_E_Recov

  Quantity Offsite Energy Recorver: T_TRI_RWM_Qty_Off_Site_E_Recov

  Quantity Recycled Onsite: T_TRI_RWM_Qty_On_Site_Recycle

  Quantity Recycled Offsite: T_TRI_RWM_Qty_Off_Site_Recycle

  Quantity Treated Onsite: T_TRI_RWM_Qty_On_Site_Treat

  Quantity Treated Offsite: T_TRI_RWM_Qty_Off_Site_Treat

  Quantity Released Non Production: T_TRI_RWM_Qty_Rel_Non_Prod

Record Selection:

1. Reporting Period: To identify the data set year - user can only select 1 item (Not currently implemented).
2. State or Operations Office: User should have option of either picking a state or picking an operations office - user can select one, many or all items.
3. Site: List should include only those sites for the reporting year, within the selected state(s) or operations office(s), that have TRI records.
4. Chemical Name: Valid list will be from the T_TRI_Chem_Name field in T_T_TRI table for the sites selected.

Sort and Group:

Sort Order:	**Group Order:**
State or Ops Office	State or Ops Office
Site	Site
Chemical Name	Chemical Name
Reporting Year	Reporting Year

4.2.1.5 Material in Inventory Reports

Report 1: Materials in Inventory (MIN) Detail Report

MIN-1: Materials in Inventory (MIN): Detail Report

Description:

This report shows information from the DOE Materials in Inventory (MIN) initiative, as reported in the 1996 report Taking Stock: A Look at the Opportunities and Challenges Posed by Inventories from the Cold War Era. Through this initiative, materials in inventory were classified into MIN categories and reported by DOE sites in order to obtain a complex-wide status on MIN management practices and disposition options. The data presented are those data collected by DOE during the 1996 MIN effort, and present volumes of materials in inventory by category and sub-category, as well as information on the amount and radiological contamination of materials. It is important to note that these data have not been updated since the 1996 data collection.

The user may select to report on:

- One or more states or Operations Offices
- One or more sites

Applicable Records:

All records from the MIN database tables

Applicable Tables:

T_M_Material

Special Calculations/Formatting:

- Numerical data should be presented by rounding numbers to 2 significant digits to the right of the decimal. A footnote should indicate that quantities less than .01 (as rounded) will appear as zero on the report. Totals should add the values first and then round the result to 2 significant digits to the right of the decimal.

- Program is not a selection criteria for this report. The program fields in the MIN database are not consistently populated and could create missed records.

- For the selected site(s), read the T_M_Material table.

- For "Min Category," pick up the M_Mat_Cat_Name attribute in the T_M_Material table.

- For the "Material Name" column, pick up the M_Mat_Name attribute in the T_M_Material table.

- For the "Material Form" column, pick up the M_Mat_Form attribute in the T_M_Material table.

- For the "Inventory Amount w/Units" column, pick up the M_Mat_Inv_Amt and the M_MAT_Unit_Name attributes in the T_M_Material table.

- For the "Radiologically Contaminated" column, pick up the M_MAt_Rad_Contam attribute in the T_M_Material table.

- For the "Facility Name" column, pick up the M_Mat_Facility_Name attribute in the T_M_Material table.

- For the "Headquarters Program" column, pick up the Prog_Recom_Disp (new field we added to store multiple programs) attribute in the T_M_Material table.

- This report should clearly indicate that the information is 1996 data.

Record Selection:

1. Reporting Period: To identify the data set they are working with (for MIN - there will only be 1 set - no updates planned). (Not currently implemented.)
2. State or Operations Office: User should have option of either picking a state or picking an operations office - user can select one, many or all items.
3. Site: List should include only those sites that are part of the selected state or operations office.

Sort and Group:

Sort Order:	**Group Order:**
State or Operations Office	State or Operations Office
Site	Site
MIN Category	MIN Category
MIN Material	MIN Material

Report 2: Materials in Inventory (MIN) by MIN Category

MIN-2: Materials in Inventory (MIN): By Category

Description:

This report shows information from the DOE Materials in Inventory (MIN) initiative, as reported in the 1996 report Taking Stock: A Look at the Opportunities and Challenges Posed by Inventories from the Cold War Era. Through this initiative, materials in inventory were classified into MIN categories and reported by DOE sites in order to obtain a complex-wide status on MIN management practices and disposition options. The data presented are those data collected by DOE during the 1996 MIN effort, and present volumes of materials in inventory by user-selected MIN-category. Information on the amount and radiological contamination of materials are also provided. It is important to note that these data have not been updated since the 1996 data collection.

The user may select to report on:

- One or more states or Operations Offices
- One or more sites
- One or more MIN Categories

Applicable Records:

All records from the MIN database tables.

Applicable Tables:

T_M_Material

Special Calculations/Formatting:

- Numerical data should be presented by rounding numbers to 2 significant digits to the right of the decimal. A footnote should indicate that quantities less than .01 (as rounded) will appear as zero on the report. Totals should add the values first and then round the result to 2 significant digits to the right of the decimal.

- Each site that reported MIN materials in the selected MIN categories should appear on the report.

- For "Min Category," pick up the M_Mat_Cat_Name attribute in the T_M_Material table.

- For the "Material ID" column, pick up the M_Mat_ID attribute in the T_M_Material table.

- For the "Material Form" column, pick up the M_Mat_Form attribute in the T_M_Material table.

- For the "Inventory Amount w/Units" column, pick up the M_Mat_Inv_Amt and the M_Mat_Unit_Name attributes in the T_M_Material table.

- For the "Radiologically Contaminated" column, pick up the M_Mat_Rad_Contam attribute in the T_M_Material table.

- For the "Facility Name" column, pick up the M_Mat_Facility_Name attribute in the T_M_Material table.

- For the "Headquarters Program" column, pick up the Prog_Recom_Disp (new field we added to store multiple programs) attribute in the T_M_Material table.

- This report should clearly indicate that the information is 1996 data.

Record Selection:

1. Reporting Period: To identify the data set they are working with (for MIN, there will be only one data set - no updates are planned). (Not currently implemented.)
2. State or Operations Office: User should have option of either picking a state or picking an operations office - user can select one, many or all items.
3. Site: List should include only those sites that are part of the selected state or operations office.
4. MIN Category: List includes (valid list from M_Mat_Cat_Name field in the T_M_Material table:
   - Chemicals
   - Depleted Uranium
   - Natural and enriched Uranium
   - Lithium
   - Sodium
   - Lead
   - Plutonium

- Spent nuclear Fuel
- Scrap Metal and Equipment
- Weapons Components

Sort and Group:

Sort Order:	**Group Order:**
MIN Category	MIN Category
Site	Site
Min Material	

4.2.1.6 Buried Transuranic Waste Reports

Report 1 and Report 2: Buried TRU by Site *(no sample formats available)*

BTRU-1: Radioactive Waste: Buried TRU Emplaced Waste by Site

BTRU-2: Radioactive Waste: Buried TRU Contaminated Soil by Site

Description:

This report shows volumes, in cubic meters, for buried TRU waste at user selected sites. The report also provides radionuclide information for the reported volumes. The user may select one or more sites to obtain buried TRU data, and may also select the activity or place of origin for the buried TRU waste.

Applicable Records:

BTRU-1: All buried TRU records where either the "Total Volume Actual Waste Emplaced" attribute or the "Total Volumes Containers Emplaced" attribute does not = null.

BTRU-2: All buried TRU records where the "Soil Emplaced Volume" attribute does not = null.

Applicable Tables:

Orig_Material

Special Calculations/Formatting:

For BTRU-1:

- Pick up records where the "Placement" attribute = Trench/Pit Burial, Greater Confinement Disposal, Underground Injection, Spill or Surface Discharge, and Other.

- Use the "Percent Exceeding 100 nCi/g" and "Percent Between 10-100 nCi/g" attributes when either the "Total Volume Actual Waste Emplaced" attribute or the "Total Volumes Containers Emplaced" attribute does not = null.

- Use the "Confidence Level" attribute when either the "Total Volume Actual Waste Emplaced" attribute or the "Total Volumes Containers Emplaced" attribute does not = null.

For BTRU-2:

- Pick up records where the "Placement" attribute = Spill or Surface Discharge, Surface Testing, Underground Testing, and Other.

- Use the "Percent Exceeding 100 nCi/g - Soil" and "Percent Between 10-100 nCi/g - Soil" attributes when the "Soil Emplaced Volume" attribute does not = null.

- Use the "Soil Confidence Level" attribute when the "Soil Emplaced Volume" attribute does not = null.

Record Selection:

Users may select one, many or all values from the following lists, in order:

1. Reporting Period: To identify the data set they are working with - user can only select 1 item (Not currently implemented).
2. State or Operations Office: User should have option of either picking a state or picking an operations office - user can select one, many or all items.
3. Site: List should include only those sites that are part of the selected state or operations office.
4. Origin: The Origin field is in table "Orig_Material". Valid values will come from this field and will change depending on site selections.

Sort and Group:

Sort Order:	**Group Order:**
State or Operations Office	State or Operations Office
Site	Site
Origin	Origin

Report 3 and Report 4: Anticipated Response Actions for Buried TRU by Site

(no sample formats available)

BTRU-3: Radioactive Waste: Anticipated Response Actions for Buried TRU Emplaced Waste by Site

BTRU-4: Radioactive Waste: Anticipated Response Actions for Buried TRU Contaminated Soil by Site

Description:

This report shows anticipated responses (management strategies) for buried TRU waste at user selected sites. Data is presented showing the anticipated response action for quantities of buried TRU waste based on the type of placement.

Applicable Records:

BTRU-3: All buried TRU records where either the "Total Volume Actual Waste Emplaced" attribute or the "Total Volumes Containers Emplaced" attribute does not = null.

BTRU-4: All buried TRU records where the "Soil Emplaced Volume" attribute does not = null.

Applicable Tables:

Orig_Material, Anticipated_Response

Special Calculations/Formatting:

For BTRU-3:

- Pick up records from the Orig_Material table where the "Placement" attribute = Trench/Pit Burial, Greater Confinement Disposal, Underground Injection, Spill or Surface Discharge, and Other. Also, pick up the "State Code" and "Managing Program Code" attributes from the Orig_Material table.

For BTRU-4:

- Pick up records from the Orig_Material table where the "Placement" attribute = Spill or Surface Discharge, Surface Testing, Underground Testing, and Other. Also, pick up the "State Code," and "Managing Program Code" attributes from the Orig_Material table.

- The "TOTAL" row for each anticipated response and the "Total Volume" column are both calculated fields. The "TOTAL" field is calculated for a placement type (i.e., down the column) while the "Total Volume" field is calculated for a buried TRU type (i.e., across a row).

Record Selection:

Users may select one, many or all values from the following lists, in order:

1. Reporting Period: To identify the data set they are working with - user can only select 1 item (Not currently implemented).
2. State or Operations Office: User should have option of either picking a state or picking an operations office - user can select one, many or all items.
3. Site: List should include only those sites that are part of the selected state or operations office.

Sort and Group:

Sort Order:	**Group Order:**
State or Operations Office	State or Operations Office
Site	Site

4.2.1.7 Spent Nuclear Fuel Reports

SNF-1: SNF Stream Detail Report

Description:

This report provides data at the lowest level of detail available in the database. Data is provided at the "stream" level. A "stream" in this database is defined as a group of materials, media, or wastes having similar origins or management requirements (i.e. same disposition path). Shows the annual (actual and projected) "material balance" in terms of volume for the SNF stream. The material balance is represented as stream additions (newly generated SNF, secondary SNF produced from processing operations, or SNF received from other sites), dispositions (SNF treated, disposed or subject to other processing), and the inventory (amount of the stream in storage).

The user may report on:

- One or many States or Operations Offices
- One or many DOE Sites
- One or many DOE Generating Programs
- One or many streams

Applicable Records:

All waste stream records where the E_WSH_Waste_Type_Code in the T_E_Waste_Stream_Header table is = "SNF".

Applicable Tables:

T_E_Waste_Stream_Header, T_E_WS_Activity_Header, T_E_WS_Activity_Annual, tx_Src_WS_Activity, x_Disp_WS_Activity

Special Calculations/Formatting:

- All volume data on this report should be in Metric Tons of Heavy Metal (MTHM)

- Quantity data should be presented by rounding numbers to 4 significant digits to the right of the decimal. Add a footnote that explains if values are lower than .0001 (rounded), they will appear as

zero on the report. Totals should add the values first and then round the result to 4 significant digits to the right of the decimal.

- For each stream selected, print the site name (S_Site_Geo_Site_shortname from tx_Geographic Site of E_WSH_Geo_Site_Code from T_E_Waste_Stream_Header), the stream name (E_WSH_Stream_Name from T_E_Waste_Stream_Header), and the waste stream code (E_WSH_WS_Code from T_E_Waste_Stream_Header) in the in the sub-header row.

- The next row, print the source site (S_Site_Geo_Site_shortname from txGeographic Site of the E_WSAH_Source_Geo_Site_Code in T_E_WS_Activity_Header), activity (WS_Activity_Name from tx_Src_WS_Activity associated with the E_WSAH_Source_WS_Activity_Code from T_E_WS_Activity_Header), and TSD system (E_Fac_Name from T_E_Facility associated with the E_WSAH_Source_Facility_ID in T_E_WS_Activity_Header).

- The next row, print the destination site (S_Site_Geo_Site_shortname from tx_Geographic Site of the E_WSAH_Disp_Geo_Site_Code in T_E_WS_Activity_Header), activity (WS_Activity_Name from tx_Disp_WS_Activity associated with the E_WSAH_Disp_WS_Activity_Code from T_E_WS_Activity_Header), and TSD system (E_Fac_Name from T_E_Facility associated with the E_WSAH_Disp_Facility_ID in T_E_WS_Activity_Header).

- For each stream, read T_E_WS_Activity_Annual and place each inventory amount in the “Inventory Volume” column, where each inventory amount is E_WSAA_inv_FYXXXX (where XXXX is each year or range of years denoted in the sample format). The Non-Annualized inventory amount should come from E_WSAA_inv_nonannualized.

- For each stream, read T_E_WS_Activity_Annual and place each source amount in the “Additions Volume” column, where each source amount is E_WSAA_source_FYXXXX (where XXXX is each year or range of years denoted in the sample format). The Non-Annualized addition amount should come from E_WSAA_source_nonannualized.

- For each stream, read T_E_WS_Activity_Annual and place each disposition amount in the “Disposition Volume” column, where each disposition amount is E_WSAA_disp_FYXXXX (where XXXX is each year or range of years denoted in the sample format). The Non-Annualized disposition amount should come from E_WSAA_disp_nonannualized.

- The "Totals FY99+" field should include all of the projected years added together (including non-annualized) for the additions and disposition (NOTE: Do not provide this total for inventory). The label on this field should be updated after each annual update. For example, after the FY2000 data collection this label should read "Total FY00+".

Record Selection:

Users may select one, many or all values from the following lists, in order:

1. Reporting Period: To identify the data set they are working with - user can only select 1 item (Not currently implemented).
2. State or Operations Office: User should have option of either picking a state or picking an operations office - user can select one, many or all items
3. Site: List should include only those sites that are part of the selected state or operations office.
4. Generating Program: List includes all valid programs for the selected site.
5 Stream Name: For this report, list should include only SNF streams applicable based on the criteria selected - user can select one, many or all items.

**For SNF reports, there is no "Waste Type" record selection, the Waste Type default to "SNF".

Sort/Group:

Sort Order:	**Group Order:**
State or Operations Office	State or Operations Office
Site	Site
Program	Program
Stream Name	

SNF-2: Spent Nuclear Fuel: Management Activity Quantities by Site

Description:

The report provides the actual or projected quantities of SNF for the major management activities (on-site generation, receipts, treatment, ship for management/storage, ship for final disposition) for selected sites over a selected date range. The SNF quantities are summed over the date range selected and totaled for amounts to be managed and amount that will be disposed to depict the conservation of mass in the spent nuclear fuel disposition processes.

The user may select to report on:

- One or more states or Operations offices
- One or more DOE Sites
- One or more DOE generating programs
- A range of years

Applicable Records:

All records in T_E_Waste_Stream_Header table where E_WSH_waste_type_code = "SNF". If a waste stream has a parent record, do not include the parent (ie. exclude SNF streams for which the disposition activity code is PARWS). Include only SNF streams where E_WSH_Unit_Name = MTHM.

Applicable Tables:

T_E_Waste_Stream_Header, T_E_WS_Activity_Header, T_E_WS_Activity_Annual, tx_Src_WS_Activity, tx_Disp_WS_Activity

Special Calculations/Formatting:

- NOTE: SNF reports for management activities cannot use the activity category code for some of the disposition and treatment activities. In some cases, you must use the activity code, in others you have to use the activity category code. Please follow specification closely to see when category code is used and when activity code is used.

- All volumes for this report are reported in Metric Tons of Heavy Metal (MTHM).

- Quantity data should be presented by rounding numbers to 4 significant digits to the right of the decimal. Add a footnote that explains if values are lower than .0001 (rounded), they will appear as zero on the report. Totals should add the values first and then round the result to 4 significant digits to the right of the decimal.

- The "Starting Inventory" column is a summation of streams, by site, of all E_WSAA_inv_FYXXXX (where XXXX equals the earliest year selected in the year range minus 1) SNF stream volumes in T_E_WS_Activity Annual.

- The "On Site Generation" column is a summation of streams, by site, of all E_WSAA_source_FYXXXX (where XXXX is each year in the selected range) SNF stream volumes in T_E_WS_Activity_Annual where the E_WSAH_source_WS_activity_code in T_E_WS_Activity_Header = "GEN".

- The "Off-Site Receipts" column is a summation of streams, by site, of all E_WSAA_source_FYXXXX (where XXXX is each year in the selected range) SNF stream volumes in T_E_WS_Activity_Annual where the E_WSAH_source_WS_activity_code in T_E_WS_Activity_Header = "RCPT", and the E_WSAH_source_Geo_Site_Code is different from the E_WSH_Geo_Site_Code in T_E_Waste_Stream_Header..

- The “Total” Column is the summation, by site, of the starting inventory, on-site generation, and off-site receipt quantities.

- The "On Site Treatments" column is a summation of streams, by site, of all E_WSAA_SNFTRT_FYXXXX (where XXXX is each year in the selected range) stream volumes in T_E_WS_Activity_Annual where E_WSAH_Disp_WS_activity_code in T_E_WS_Activity_Header = "TRTSF".

- The "Ship to Other DOE Site for Management/Storage" column is a summation of streams, by site, of all E_WSAA_disp_FYXXXX (where XXXX is each year in the selected range) SNF stream volumes in T_E_WS_Activity_Annual where the E_WSAH_disp_WS_activity_code in T_E_WS_Activity_Header is NOT equal to "DISP" and where the E_WSAH_disp_geo-site_code is different from the E_WSH_Geo_Site_Code in Waste_Stream_Header.

- The "Ship for Disposal" column is a summation of streams, by site, of all E_WSAA_disp_FYXXXX (where XXXX is each year in the selected range) SNF stream volumes in T_E_WS_Activity_Annual where the E_WSAH_disp_WS_activity_code in T_E_WS_Activity_Header = "DISP" and where the E_WSAH_disp_geo_site_code is different from the E_WSH_Geo_Site_Code in Waste_Stream_Header.

- The second "Total" column is the summation, by site, of the “On Site Treatment”, “Ship to Other DOE Site for Management/Storage”, and “Ship for Final Disposition” columns.

Record Selection:

Users may select one, many or all values from the following lists, in order:

1. Reporting Period: To identify the data set they are working with - user can only select 1 item. (Not currently implemented)
2. State or Operations Office: User should have option of either picking a state or picking an operations office - user can select one, many or all items from each list.
3. Site: List should include only those sites that are part of the selected state or operations office.
4. Generating Program: List includes, EM, DP, SC, NE - user can select one, many or all valid programs for the state and site.
5. Year Range: User may select a start and end year for the year range (and can select the same year as start and end to select only 1 year), OR may select all years including non-annualized. Start and end lists includes all years in the lifecycle (i.e. 1999 through 2010 in 1 year increments, 2011 through 2070 in five year increments).

- The selection criteria for the user to pick a year or range of years needs to clearly identify what years are "Actual" data (current year and back), and what are "Projected Data" (greater than current year).

- For SNF reports, there is no "Waste Type" record selection, the Waste Type default to "SNF".

Sort and Group:

Sort Order:	**Group Order:**
State or Operations Office	State or Operations Office
Site	Site
Program	Program

SNF-3: Spent Nuclear Fuel: Management Activity Quantities by Date Range

Description:

The report provides the actual or projected quantities of SNF for the major management activities (on-site generation, receipts, treatment, ship for management/storage, ship for final disposition) for one or more selected sites for each year in a selected date range. The SNF quantities are summed for each year in the range totaled for amounts to be managed and amount that will be disposed to depict the conservation of mass in the spent nuclear fuel disposition processes.

The user may select to report on:

- One or more states or Operations offices
- One or more DOE Sites
- One or more DOE generating programs
- A range of years

Applicable Records:

All waste stream records in T_E_Waste_Stream_Header where E_WSH_waste_type_name = "SNF". If a waste stream has a parent record, do not include the parent (i.e. exclude SNF streams for which the disposition activity code is “PARWS”). Include only SNF streams where E_WSH_Unit_Name = MTHM.

Applicable Tables:

T_E_Waste_Stream_Header, T_E_WS_Activity_Header, T_E_WS_Activity_Annual, txWS_Activity

Formatting and Special Calculations

- NOTE: SNF reports for management activities cannot use the activity category code for some of the disposition and treatment activities. In some cases, you must use the activity code, in others you have to use the activity category code. Please follow specification closely to see when category code is used and when activity code is used.

- All volumes for this report are reported in Metric Tons of Heavy Metal (MTHM).

- Quantity data should be presented by rounding numbers to 4 significant digits to the right of the decimal. Add a footnote that explains if values are lower than .0001 (rounded), they will appear as

zero on the report. Totals should add the values first and then round the result to 4 significant digits to the right of the decimal.

- The "Starting Inventory" column is a summation of streams, by year, of all E_WSAA_inv_FYXXXX (where XXXX equals the earliest year selected in the year range minus 1) SNF stream volumes in T_E_WS_Activity Annual.

- The "On Site Generation" column is a summation of streams, by year, of all E_WSAA_source_FYXXXX (where XXXX is each year in the selected range) SNF stream volumes in T_E_WS_Activity_Annual where the E_WSAH_source_WS_activity_code in T_E_WS_Activity_Header = "GEN".

- The "Off-Site Receipts" column is a summation of streams, by year, of all E_WSAA_source_FYXXXX (where XXXX is each year in the selected range) SNF stream volumes in T_E_WS_Activity_Annual where the E_WSAH_source_WS_activity_code in T_E_WS_Activity_Header = "RCPT", and where E_WSAH_source_Geo_Site_Code is different from the E_WSH_Geo_Site_Code in T_E_Waste_Stream_Header .

- The “Total” Column is the summation, by year, of the starting inventory, on-site generation, and off-site receipt quantities.

- The "On Site Treatments" column is a summation of streams, by year, of all E_WSAA_SNFTRT_FYXXXX (where XXXX is each year in the selected range) stream volumes in T_E_WS_Activity_Annual where E_WSAH_Disp_WS_activity_code in T_E_WS_Activity_Header = "TRTSF".

- The "Ship to Other DOE Site for Management/Storage" column is a summation of streams, by year, of all E_WSAA_disp_FYXXXX (where XXXX is each year in the selected range) SNF stream volumes in T_E_WS_Activity_Annual E_WSAH_disp_WS_activity_code in T_E_WS_Activity_Header is NOT equal to "DISP" and where the E_WSAH_disp_geo_site_code is different from the E_WSH_Geo_Site_Code in Waste_Stream_Header.

- The "Ship for Disposal" column is a summation of streams, by year, of all E_WSAA_disp_FYXXXX (where XXXX is each year in the selected range) SNF stream volumes in T_E_WS_Activity_Annual where E_WSAH_disp_WS_activity_code in T_E_WS_Activity_Header = "DISP" and where the E_WSAH_disp_geo_site_code is different from the E_WSH_Geo_Site_Code in Waste_Stream_Header.

- The second "Total" column is the summation, by year, of the “On Site Treatment”, “Ship to Other DOE Site for Management/Storage”, and “Ship for Final Disposition” columns.

Record Selection:

Users may select one, many or all values from the following lists, in order:

1. Reporting Period: To identify the data set they are working with - user can only select 1 item (not currently implemented).
2. State or Operations Office: User should have option of either picking a state or picking an operations office - user can select one, many or all items
3. Site: List should include only those sites that are part of the selected state or operations office.
4. Generating Program: List includes, EM, DP, SC, NE - user can select one, many or all vaoid programs for the state and site.
5. Year Range: User may select a start and end year for the year range (and can select the same year as start and end to select only 1 year), OR may select all years including non-annualized. Start and end lists includes all years in the lifecycle (i.e. 1999 through 2010 in 1 year increments, 2011 through 2070 in five year increments).

- The selection criteria for the user to pick a year or range of years needs to clearly identify what years are "Actual" data (current year and back), and what are "Projected Data" (greater than current year).

- For SNF reports, there is no "Waste Type" record selection, the Waste Type default to "SNF".

Sort and Group:

Sort Order:	**Group Order:**
State or Operations Office	State or Operations Office
Site	Site
Program	Program
Year	Year

SNF-4: Spent Nuclear Fuel: Shipping and Receiving Summary

Description:

This report summarizes the SNF shipping and receiving activity across the DOE-complex. The user selects a range of years to track shipping and receiving activity. There are three DOE sites that receive SNF: Hanford, Idaho National Environmental Engineering Laboratory, and Savannah River. If DOE sites plan on shipping SNF but have not yet determined which DOE site will receive the SNF, these quantities are reported under the "To Be Determined (TBD)" column. There are some SNF quantities late in the SNF stream lifecycle that will be going to other DOE sites. These quantities appear in the "Other DOE Sites" column. Details on sites included in this column will appear as a footnote on the report. Quantities are presented for each site that is, or is planning to, ship to one of the DOE receiving sites.

The user may select to report on:

- A range of years
- One or more DOE Programs

Applicable Records:

- All waste stream records in T_E_Waste_Stream_Header where E_WSH_waste_type_code = "SNF".
- If a waste stream has a parent record, do not include the parent.

Applicable Tables:

T_E_WasteStreamHeader, T_E_WS_Activity, T_E_WS_Activity_Header, T_E_WS_Activity Annual

Special Calculations/Formatting:

- All volumes should be reported in Metric Tons of Heavy Metal (MTHM).

- Quantity data should be presented by rounding numbers to 4 significant digits to the right of the decimal. Add a footnote that explains if values are lower than .0001 (rounded), they will appear as zero on the report. Totals should add the values first and then round the result to 4 significant digits to the right of the decimal.

- The receiving sites that should be hard-coded in the receiving site columns for SNF are Hanford, INEEL, Savannah River, Other DOE Site, and To Be Determined.

For the Hanford, INEEL, and Savannah River Sites:

- For all SNF stream records, read the E_WSH_geo_site_code in T_E_Waste_Stream_Header to obtain all waste streams where the E_WSH_geo_site_code is equal to HASI, INEL, or SARS. For each of these streams, read T_E_WS_Activity_Header table to obtain the E_WSAH_source_geo_site_code. If E_WSAH_source_geo_site code is different from the receiving site (E_WSH_geo_site_code), this is a shipping site. Exclude waste streams where the Geographic Site Category (S_Site_Geo_Site_Category in the TS_Site table) of the E_WSAH_source_geo_site is "COMM" or "TBD".
- For each shipping, receiving site pair, read the E_WSAA_source_FYXXXX (where XXXX = the selected year(s)) values from the T_E_WS_Activity_Annual table and sum the volumes for the years selected.

For the To Be Determined Column:

- For each SNF stream, read T_E_WS_Activity_Header table to obtain the E_WSAH_disp_geo_site_code. Select records where E_WSAH_disp_geo_site code (receiving site) is different from E_WSH_geo_site_code in the T_E_Waste_Stream_Header table (shipping site) AND where the disp_geo_site_code is "DOE" or "TBD" “TBDO” or “NAVY”.
- For each pair of shipping and TBD sites, read T_E_WS_Activity_Annual for each stream and sum the E_WSAA_disp_FYXXXX (where XXXX = the selected year(s)) values for the years selected.

For the Other DOE Site Column:

- For each waste stream, read T_E_WS_Activity_Header table to obtain the E_WSAH_disp_geo_site_code. Select records where the E_WSAH_disp_geo_site code (receiving site) is different from the E_WSH_geo_site_code in T_E_Waste_Stream_Header (shipping site) AND where the S_Site_Geo_Site_Category (from the T_S_Site table) of T_E_WSAH_disp_geo_site_code is equal to “N-DOE” AND the E_WSAH_disp_geo_site_code in the WS_Activity_Header table is NOT equal to "DOE" or “NAVY”.
- For each pair of shipping and Other DOE site, read T_E_WS_Activity_Annual for each stream and sum the E_WSAA_disp_FYXXXX (where XXXX = the selected year(s)) values for the years selected.
- The Shipping Site Total column is a summation of all the volumes for a given shipping site (added across the row in the sample format)
- The Receiving Site Total is a summation of all of the volumes for a given receiving site (added down the column).

Record Selection:

Users may select one, many or all values from the following lists, in order:

1. Reporting Period: To identify the data set they are working with - user can only select 1 item (Not currently implemented).
2. Generating Program: List includes all valid programs.
3. Year Range: User may select a start and end year for the year range (and can select the same year as start and end to select only 1 year), OR may select all years including non-annualized. Start and end lists includes all years in the lifecycle (i.e. 1999 through 2010 in 1 year increments, 2011 through 2070 in five year increments

- The selection criteria for the user to pick a year or range of years needs to clearly identify what years are "Actual" data (current year and back), and what are "Projected Data" (greater than current year).-
- For SNF reports, there is no "Waste Type" record selection, the Waste Type default to "SNF".

Sort and Group:

Sort Order:	**Group Order:**
Program	Program
Year Range	Year Range
Shipping Site	Shipping Site

SNF-5: Spent Nuclear Fuel: Annual Shipping and Receiving Quantities

Description:

This report presents for a particular receiving site, the annual quantities of SNF shipped, or planned to be shipped to that site. The report can be generated for multiple receiving sites.

There are three DOE sites that receive SNF: Hanford, Idaho National Environmental Engineering Laboratory, and Savannah River. To obtain information on shipments that DOE plans to make, but has not determined the receiving site, the user can select the "To Be Determined (TBD)" receiving site. There are some SNF quantities late in the SNF stream lifecycle that will be going to other DOE sites. The user can select the “Other DOE Sites” receiving site option. Details on sites included in this category will appear as a footnote on the report. Quantities are presented for each site that is, or is planning to, ship to the selected receiving site(s). The user may also select the DOE generating program of interest.

The user may report on:

- One or more DOE sites that receive SNF (i.e. "Receiving Site")
- One or more DOE Generating Programs

Applicable Records:

- All waste stream records in T_E_Waste_Stream_Header where attribute E_WSH_waste_type_name = "SNF".
- If a waste stream has a parent record, do not include the parent.

Applicable Tables:

T_E_Waste_Stream_Header, tx_Src_WS_Activity, tx_Disp_WS_Activity, T_E_WS_Activity_Header, T_E_WS_Activity_Annual

Special Calculations/Formatting:

- All volumes for this report are reported in Metric Tons of Heavy Metal (MTHM).

- Quantity data should be presented by rounding numbers to 4 significant digits to the right of the decimal. Add a footnote that explains if values are lower than .0001 (rounded), they will appear as zero on the report. Totals should add the values first and then round the result to 4 significant digits to the right of the decimal.

If the user selects the Hanford, INEEL, or Savannah River Sites:

- Identify all waste streams for the selected RECEIVING site. (E_WSH_geo_site_code in T_E_Waste_Stream_Header equals the selected RECEIVING site).
- Read T_E_WS_Activity_Header, if E_WSAH_source_geo_site_code is not the same as E_WSH_ geo_site_code in T_E_Waste_Stream_Header table, the E_WSAH_Source_Geo_Site_Code is a shipping site. Do not include E_WSAH_Source_Geo_Site_Code that = "TBD".
- For each shipping site identified for the selected receiving site, read T_E_WS_Activity_Annual for each of the E_WSAA_Source_FYXXXX volumes and list the amount for each year and site combination. E_WSAA_Source_FY2011-2070 and for non-annualized volumes, sum all values and display in the “2011-70(P) & Non-Annualized” column.

If user selects the Receiving Site "To Be Determined":

- Read T_E_WS_Activity_Header to identify waste streams where the T_E_WSAH_disp_geo_site_code (receiving site) is different from the E_WSH_geo_site_code in T_E_Waste_Stream_Header AND E_WSAH_disp_geo_site_code is "DOE" or "TBD" or “TBDO” or “NAVY”.
- For each pair of shipping and TBD sites, read T_E_WS_Activity_Annual for each stream and sum the E_WSAA_Disp_FYXXXX (where XXXX = each year in the lifecycle) for each shipping site. For the E_WSAA_Disp_FY 2011-2070 and for non-annualized volumes, sum all values and display in the “2011-70(P) & Non-Annualized” column.

If the user selects the Receiving Site "Other DOE Site":

- Read T_E_WS_Activity_Header to identify waste streams where the E_WSAH_disp_geo_site_code (receiving site) is different from E_WSH_geo_site_code in T_E_Waste_Stream_Header AND the S_Site_Geo_Site_Category (from T_S_Site table) of E_WSAH_disp_geo_site_code is equal to “N-DOE” AND the E_WSAH_disp_geo_site_code is not equal to "DOE"or “NAVY”.
- For each pair of shipping and Other DOE Site, read T_E_WS_Activity_Annual for each stream and sum the E_WSAA_Disp_FYXXXX (where XXXX = each year in the lifecycle) for each shipping site. For the E_WSAA_Disp_FY 2011-2070 and for non-annualized volumes, sum all values and display in the “2011-70(P) & Non-Annualized” column.
- Shipping sites should be organized by the states where they are located.

- The "Total" row represents all volumes shipped to the receiving site for each year (summed down each column)

Record Selection:

Users may select one, many or all values from the following lists, in order:

1. Reporting Period: To identify the data set they are working with - user can only select item (Not currently implemented).
2. Receiving Site: The receiving site list should only include the following sites:
   - Hanford
   - Idaho National Environmental Engineering Laboratory (INEEL)
   - Savannah River
   - Other DOE Site
   - To Be Determined
3. Generating Program: List includes all valid programs for the receiving site(s).

**For SNF reports, there is no "Waste Type" record selection, the Waste Type default to "SNF".

Sort and Group:

Sort Order:	**Group Order:**
Receiving Site	Receiving Site
Program	Program
Shipping Site State	Shipping Site State
Shipping Site	Shipping Site

SNF-6: Spent Nuclear Fuel: Annual Quantities for Selected Management Activities
(specification is being changed - no format is available)

Description:

This report presents for a particular site and a particular management activity (e.g., on site generation, receipts, treatment, shipments for additional management/storage, shipments for final disposition), the actual or projected annual quantities of SNF that correspond to that management activity. The report can be generated for multiple sites and management activities.

The user may select to report on:

- One or more states or Operations offices
- One or more DOE sites
- One or more management activities
- One or more DOE generating programs

Applicable Records:

All waste stream records in T_E_Waste_Stream_Header where attribute E_WSH_waste_type_name = "SNF". If a waste stream has a parent record, do not include the parent (i.e. exclude SNF streams for which the disposition activity code is PARWS). Include only SNF streams where E_WSH_Unit_Name = MTHM.

Applicable Tables:

T_E_Waste_Stream_Header, TxWS_Activity, T_E_WS_Activity_Header, T_E_WS_Activity Annual

Special Calculations/Formatting:

- There is no waste type selection for this report. Waste type should default to "SNF".

- All volumes for this report should be reported in Metric Tons of Heavy Metal (MTHM).

- Quantity data should be presented by rounding numbers to 4 significant digits to the right of the decimal. Add a footnote that explains if values are lower than .0001 (rounded), they will appear as zero on the report. Totals should add the values first and then round the result to 4 significant digits to the right of the decimal.

- Read T_E_WS_Activity_Header table to identify all waste streams that match the selected activity (If user selects On Site Generation, select all streams where E_WSAH_Source_Activity_Code (T_E_WS_Activity_Header) is equal to "GEN"; If user selects Receipts, select all streams where E_WSAH_Source_Activity_Code (T_E_WS_Activity_Header) is equal to "RCPT"; if user selects On Site Treatment, select all streams where the E_WSAH_Disp_Activity_Code (T_E_WS_Activity_Header) is equal to "TRTSF"; If user selects Ship to Other DOE Site for Management/Storage, select streams where E_WSAH_Disp_WS_Activity_Code (T_E_WS_Activity_Header) is NOT equal to "DISP"AND where E_WSAH_Disp_Geo_Site_Code is not equal to E_WSH_Geo_Site_Code in the T_E_Waste_Stream_Header table. If the user selects Ship for Final Disposition, select streams E_WSAH_Disp_WS_Activity_Code (T_E_WS_Activity_Header) = "DISP"AND where E_WSAH_Disp_Geo_Site_Code is not equal to E_WSH_Geo_Site_Code in the T_E_Waste_Stream_Header table.

- Read T_E_WS_Activity_Annual. If the selected activity is a source activity (i.e. On Site Generation or Off Site Receipts), sum each activity annual value (E_WSAA_source_FYXXX) for each lifecycle year and print the total for all streams for the selected activity in the year column. For the source_FY 2011-2070 and for non-annualized volumes, sum all values and display in the "2011-70(P) & Non-Annualized" column.

- If the selected activity is On Site Treatment, sum each activity annual value E_WSAA_SNFTRT_FYXXXX for each lifecycle year and print the total for all streams for the selected activity in the year column. For the source_FY 2011-2070 and for non-annualized volumes, sum all values and display in the "2011-70(P) & Non-Annualized" column.

- If the selected activity is Ship to Other DOE Site for Management/Storage or Ship for Final disposition, for each waste stream sum each activity annual value (disp_FYXXXX) for each lifecycle year and print the total for all streams for the selected activity in the year column. For the disp_FY 2011-2070 and for non-annualized volumes, sum all values and display in the "2011-70(P) & Non-Annualized" column.

Record Selection:

Users may select one, many or all values from the following lists, in order:

1. Reporting Period: To identify the data set they are working with - user can only select 1 item (Not currently implemented).
2. State or Operations Office: User should have option of either picking a state or picking an operations office - user can select one, many or all items
3. Site: List should include only those sites that are part of the selected state or operations office.
4. Generating Program: List includes all valid programs for the state and site.

5. Activity: List includes the following activities (user can select more than 1)

    - On Site Generation
    - Off-Site Receipts
    - On Site Treatment
    - Ship to Other DOE Site for Management/Store
    - Ship for Final Disposal

- For SNF reports, there is no "Waste Type" record selection, the Waste Type default to "SNF".

Sort and Group:

Sort Order:	**Group Order:**
State or Operations Office	State or Operations Office
Site	Site
Program	Program
Activity	Activity

SNF-7: Spent Nuclear Fuel: Annual Projections for Shipping and Receiving

Description:

This report shows annual quantities, for each SNF stream shipped, or planned to be shipped, to user-selected receiving sites. There are three DOE sites that receive SNF: Hanford, Idaho National Environmental Engineering Laboratory, and Savannah River. If DOE sites plan on shipping SNF but have not yet determined which DOE site will receive the SNF, these quantities are reported as "To Be Determined (TBD)". In addition, there are quantities of SNF later in the SNF stream life cycle that currently are planned to go to other DOE sites. A footnote at the bottom of the report details what sites are included in this category.

The user can select to report on:

- One or more DOE receiving sites
- One or more Streams

Applicable Records:

All waste streams in T_E_Waste_Stream_Header where waste type = "SNF". If waste stream record has a parent waste stream, do not include the parent.

Applicable Tables:

T_E_Waste_Stream_Header, T_E_WS_Activity_Annual, T_E_WS_Activity_Header, T_S_Site

Special Calculations/Formatting:

- Volumes for this report are in Metric Tons of Heavy Metal (MTHM).

- Quantity data should be presented by rounding numbers to 4 significant digits to the right of the decimal. Add a footnote that explains if values are lower than .0001 (rounded), they will appear as zero on the report. Totals should add the values first and then round the result to 4 significant digits to the right of the decimal.

If the user selects Hanford, Idaho National Environmental Engineering Laboratory, and Savannah River:

- For waste streams for the selected receiving site, identify SNF streams where the E_WSAH_source_geo_site_code in T_E_WS_Activity_Header is different from the E_WSH_geo_site_code in T_E_Waste_Stream_Header (source_geo_site_code is the shipping site).
- Read T_E_WS_Activity_Annual for each SNF stream meeting the above criteria and print the E_WSAA_source_FYXXXX (where XXXX equals each year in the life cycle) for each shipping site.
- For the “Non-Annualized” row, pull the E_WSAA_source-nonannualized field from T_E_WS_Activity_Annual.

If user selects the Receiving Site "To Be Determined":

- Read T_E_WS_Activity_Header to identify waste streams where the E_WSAH_disp_geo_site_code (receiving site) is different from the E_WSH_geo_site_code in T_E_Waste_Stream_Header (shipping site) AND the E_WSAH_disp_geo_site_code is "DOE", "TBD", “TBDO” or “NAVY”. These are "to be determined" receiving sites.
- Read T_E_WS_Activity_Annual for each SNF stream meeting the above criteria and print the disp_FYXXXX (where XXXX = each year in the life cycle) for each shipping site.
- For the “Non-Annualized” row, pull the E_WSAA_disp_nonannualized field from T_E_WS_Activity_Annual.

If user selects the Receiving Site "Other DOE Site":

- Read T_E_WS_Activity_Header to identify waste streams where the E_WSAH_disp_geo_site_code (receiving site) is different from E_WSH_geo_site_code in T_E_Waste_Stream_Header (shipping site) AND S_Site_Geo_Site_Category (from T_S_Site) of the E_WSAH_disp_geo_site_code is "N-DOE" AND E_WSAH_disp_geo_site_code is NOT equal to "DOE", “NAVY”, “TBD” or “TBDO”.
- Read T_E_WS_Activity_Annual for each SNF stream meeting the above criteria and print the E_WSAA_disp_FYXXXX (where XXXX = each year in the life cycle) for each shipping site.
- For the “Non-Annualized” row, pull the E_WSAA_disp_nonannualized field from T_E_WS_Activity_Annual.

For the Report:

- Stream name and generating program should appear in the sub-header.
- Shipping sites within the same state should appear together (grouped).\
- Streams should appear together for the same shipping site.

Record Selection:

Users may select one, many or all values from the following lists, in order:

1. Reporting Period: To identify the data set they are working with - user can only select 1 item (Not currently implemented).
2. Receiving Site: Must be clearly convey to the user that when picking a site, they are picking a RECEIVING SITE. Receiving site selection list should be hardcoded to include
   - Hanford
   - Idaho National Environmental Engineering Laboratory (INEEL)
   - Savannah River
   - To Be Determined
   - Other DOE Site
3. Stream: A valid list of streams for the receiving site should appear for the user to select one or more streams.

**For SNF reports, there is no "Waste Type" record selection, the Waste Type default to "SNF".

Sorting/Grouping:

Sort Order:	**Group Order:**
Receiving Site	Receiving Site
Shipping Site State	Shipping Site State
Shipping Site	Shipping Site
Stream Name	Stream Name

SNF-8: Spent Nuclear Fuel: Streams by Source Reactor

Description:

This report shows SNF streams that originated, all or in part, from user selected source reactors. The user selects a location for the source reactor (by designating city and state), and report provides information on SNF streams generated by the reactor at that location. Data presented are volumes of each stream originating from the selected source reactor (as a percentage of total volume as well as in metric tons of heavy metal) and isotopes present in each stream. Other characteristic data, such as reporting DOE site, DOE generating program, and total curies are also presented. Data are presented for isotope concentrations, total curies for the stream, DOE program that generated the stream, and planned disposition. User may select to report on:

- One or many countries where source reactors are located
- One or many states/territories where source reactors are located
- One or many cities where source reactors are located
- One or many source reactors

Applicable Records:

All waste streams in T_E_Waste_Stream_Header where waste type = "SNF". If waste stream record has a parent waste stream, do not include the parent.

Applicable Tables:

T_E_Waste_Stream_Header, T_E_SNF_Stream_Source_Reactor, T_E_SNF_Reactor, T_E_WS_Activity_Header, T_E_WS_Activity_Annual.

Special Calculations/Formatting:

- All volumes for this report are in Metric Tons of Heavy Metal (MTHM).
- Quantity data should be presented by rounding numbers to 4 significant digits to the right of the decimal. Add a footnote that explains if values are lower than .0001 (rounded), they will appear as zero on the report. Totals should add the values first and then round the result to 4 significant digits to the right of the decimal.
- Read T_E_SNF_Reactor and present a selection list of Countries using E_SNFR_County for the user to select a reactor country location. All Countries should be a valid selection.
- If USA is selected as the Country, read_TE_SNF Reactor and present a selection list of states using E_SNFR_State for the user to select a reactor state location. All states should be a valid selection.

- Read T_E_SNF Reactor and present a selection list of cities using E_SNFR_City for the user to select a reactor city location. All cities should be a valid selection.
- For each reactor in the selected location(s), read T_E_SNF Stream Source_Reactor to get SNF streams (T_ESNFSSR_WS_Code) associated with the reactors chosen (T_E_SNFSSR_Reactor_ID).
- For each SNF stream, read T_E_Waste_Stream_Header to obtain the "Reporting Site" (E_WSH_geo_site_code), "Generating Program" (E_WSH_Gen_Prog_Code, and "Total Curies for the Stream" (E_WSH_BT_Total_Activity_CI).
- For each SNF stream, read T_E_WS_Activity_Header to obtain the "Planned Disposition Site" (E_WSAH_disp_geo_site_code, print the shortname of the geographic site associated with the code (S_Site_Geo_Site_Shortname from T_S_Site).
- For each SNF stream, read T_E_WS_Activity_Annual for the most current year where actual quantities are available to get the "Current Year Inventory Volume" (E_WSAA_inv_FYXXXX where XXXX is equal to the most current year for ACTUAL quantities).
- For each SNF stream, read T_E_SNF Stream_SourceReactor to get the "% Volume from Source Reactor (E_WNFSSR_Inventory_pct multiplied by 100).
- Multiply the "Current Year Inventory Volume" by the "% Volume from Source Reactor" to get the "Volume from Source Reactor".

Record Selection:

1. Reporting Period: To identify the data set they are working with - user can only select 1 item (Not currently implemented).
2. Reactor Country
3. Reactor State: Applicable if USA selected.
4. Reactor City
5. Source Reactor: This is a list of reactors associated with the selected city (E_SNFR_Reactor Name from T_E_SNF_Reactor.

Sorting/Grouping:

Sort Order:	**Group Order:**
Reactor Country	Reactor Country
Reactor State	Reactor State
Reactor City	Reactor City
Source Reactor	Source Reactor
Stream	Stream

SNF-9: Spent Nuclear Fuel: Streams by Facility

Description:

This report shows SNF streams stored at a particular spent nuclear fuel facility. In the case of DOE sites, facilities listed include structures or areas within the DOE site where the spent nuclear fuel is located. In the case of non-DOE sites, the facilities listed may be more general such as a university or foreign country. The user selects a site of interest, and one or more facilities within that site or associated with that site where spent nuclear fuel is present. Data presented are volumes of each stream at the selected spent nuclear fuel, fuel type(s) of the SNF stream, and the percentage contribution of each source reactor. Reporting DOE site and total curies for the stream(s) are also presented.

The user may select to report on:

- One or more states or Operations offices
- One or more DOE sites
- One or more facilities

Applicable Records:

All waste streams in T_E_Waste_Stream_Header where waste type = "SNF". If waste stream record has a parent waste stream, do not include the parent.

Applicable Tables:

T_E_Waste_Stream_Header, T_E_SNF_Stream_Fuel_Type, T_E_SNF_Facility, T_E_WS_Activity_Annual.

Special Calculations/Formatting:

- All volumes for this report are in Metric Tons of Heavy Metal (MTHM).

- Quantity data should be presented by rounding numbers to 4 significant digits to the right of the decimal. Add a footnote that explains if values are lower than .0001 (rounded), they will appear as zero on the report. Totals should add the values first and then round the result to 4 significant digits to the right of the decimal.

- The facilities list provided should be built from the table T_E_SNF_Stream_Location. Use field E_SNFStL_Site_Facl_ID (From Newest Migration - field name may not be exact), lookup to the txSNF_Site_Facility table (From Newest Migration - table name may not be exact) and retrieve the facl_name (From Newest Migration - field name may not be exact). The facility names retrieved that are associated with the selected sites are the names which should appear on the pick list for that site.

- Stream name is retrieved from T_E_Waste_Stream_Header (e_WSH_Stream_Name) for those streams associated with the selected facilities.

- Total curies is retrieved from T_E_Waste_Stream_Header (e_WSH_BT_Total_Activity_Ci) for those streams associated with the selected facilities.

- For each SNF stream, read T_E_Waste_Stream_Header to obtain the "Reporting Site"(E_WSH_geo_site_code, read T_S_Site and print the S_Site_Geo_Site_Shortname) and "Total Curies for the Stream" (E_WSH_BT_total_activity_CI).

- For each SNF stream, read T_E_WS_Activity_Annual for the most current year to get the "Current Year Inventory Volume" (E_WSAA_inv_FYXXXX where XXXX is equal to the most current year).

- For each SNF Stream, read T_E_SNF_Stream_Source_Reactor to get the Reactor IDs (E_SNFSSR_Reactor ID) associated with the stream. Look up to the T_E_SNF_Reactor table and print the reactor name (E_SNFR_Reactor_Name) associated with the Reactor ID.

- For each SNF stream, read T_E_SNF Stream_SourceReactor to get the "% Volume from Source Reactor (E_WNFSSR_Inventory_pct multiplied by 100).

- For each SNF stream, read T_E_SNF_Stream_Fuel_Type to get the fuel types (E_SNFSFT_Fuel_Type_Name) associated with the SNF stream. List each fuel type separately.

Record Selection:

1. Reporting Period: To identify the data set they are working with - user can only select 1 item (Not currently implemented).
2. State or Operations Office: User should have option of going either picking a state or picking an operations office - user can select one, many or all items
3. Site: List should include only those sites that are part of the selected state or operations office

   AND that have valid records in tx_SNF_Site_Facility table..
4. Facility: List valid facilities for the site(s) selected - user can select one many, or all items.

Sorting/Grouping:

Sort Order:	**Group Order:**
State	State
Site	Site
Facility	Facility
Stream	

SNF-10: Stream Characteristics Detail

Shows stream characteristic data such as isotopes and curie estimates, and fuel types included in the stream. The report also shows the percentage of each stream stored at a particular location in the site, and the percentage of the stream originating from source reactors.

The user may report on:

- One or many States or Operations Offices
- One or many DOE Sites
- One or many DOE Generating Programs
- One or many streams

Applicable Records:

All waste stream records in T_E_Waste_Stream_Header where attribute E_WSH_waste_type_code = "SNF".

Applicable Tables:

T_E_WasteStreamHeader, T_E_WS_Contam_Profile, T_E_WS_Isotope, WS_Activity_Annual, txWS_Activity, T_E_SNF_Stream_Fuel_Type, T_E_SNF_Stream_Location, T_E_SNF_Stream_Source_Reactor, T_E_SNF_Reactor.

Special Calculations/Formatting:

- All volume data on this report should be in Metric Tons of Heavy Metal (MTHM)

- Quantity data should be presented by rounding numbers to 4 significant digits to the right of the decimal. Add a footnote that explains if values are lower than .0001 (rounded), they will appear as zero on the report. Totals should add the values first and then round the result to 4 significant digits to the right of the decimal.

- The "Generating Program" is from the generating_program field in the WasteStreamHeader table for each stream.

- To get the “Stream Fuel Types” for each SNF Stream, read T_E_SNF_Stream_Fuel_Type and list all Fuel Type Names (E_SNFSFT_Fuel_Type_Name) associated with the Waste Stream.

- To get the “Storage Facility” for each SNF Stream, read T_E_SNF_Stream_Location and print all Storage Facility Names (E_SNFStL_Site_Facility_Name) associated with the Waste Stream. For the “% of Stream Quantity”read the Percent of the SNF field (E_SNFStL_Inventory_pct), multiply that field by 100, and print the result on the report.

- To get the “Source Reactor” for each SNF stream, read T_E_SNF_Stream_Source_Reactor and list each Source Reactor (using ESNFSSR_Reactor_ID, lookup to table T_E_SNF_Reactor and print E_SNFR_Reactor_Name) For the “% of Stream Quantity”read the Percent of the SNF field (E_SNFSSR_Inventory_pct), multiply that field by 100, and print the result on the report.

- Print the stream code, stream name, MPC Name, and Total Curies from T_E_WasteStreamHeader.

- Each stream can have many Profiles to report Isotope data. For each stream selected, read the T_E_WS_Contamt_Profile table to retrieve Profile name. The percentage field is the E_ConP_Stream_Pct attribute. For each profile, read T_E_WS_Isotope to retrieve the Isotope_concentration_avg, Isotope_concentration_LL, Isotope_concentration_UL for each Isotope in the profile. Repeat for all profiles for the selected waste stream(s).

- For each profile, read the T_E_WS_Haz_Contam table to retrieve the HAZ_contaminant_concentration_avg, HAZ_contaminant_concentration_LL, HAZ_contaminant_concentration_UL for each contaminant in the profile. Repeat for all profiles for the selected waste stream(s).

Record Selection:

Users may select one, many or all values from the following lists, in order:

1. Reporting Period: To identify the data set they are working with - user can only select 1 item (Not currently implemented).
2. State or Operations Office: User should have option of either picking a state or picking an operations office - user can select one, many or all items
3. Site: List should include only those sites that are part of the selected state or operations office.
4. Generating Program: List includes, EM, DP, SC, NE - user can select one, many or all items.
5. Stream Name: For this report, list should include only SNF streams applicable based on the criteria selected - user can select one, many or all items.

**For SNF reports, there is no "Waste Type" record selection, the Waste Type default to "SNF".

Sort/Group:

Sort Order:	**Group Order:**
State or Operations Office	State or Operations Office
Site	Site
Program	Program
Stream Name	

4.2.2 Summary Report Specifications

Report Sum-1: DOE Waste and SNF Generating Sites in the Current Year

Description:

This report summarizes the DOE sites that are generating new waste or spent nuclear fuel in the current reporting year (i.e. the most recent year where actual quantities have been reported in the Central Internet Database). Quantities of newly generated waste or spent nuclear fuel are presented for each waste type and DOE program.

Applicable Records:

All records in T_E_WS_Activity_Header where E_WSAH_source_WS_Activity_Code is equal to "GEN". For this set of waste streams, exclude waste stream records that have a value in E_WSH_Parent_WS_Code of the T_E_Waste_Stream_Header table and exclude records where the unit name associated with the amount(s) (E_WSH_Unit_Name from T_E_Waste_Stream_Header) is equal to "number of tanks"(NT) or "number of items" (NI).

Applicable Tables:

T_E_Waste_Stream_Header, T_E_WS_Activity_Header, T_E_WS_Activity_Annual, tx_Src_WS_Activity

Special Calculations/Formatting:

- The most current year where actuals are available should be used and designated at the beginning of the report.
- After "GEN" waste streams are identified, read E_WSAH_source_geo_site_code in T_E_WS_Activity_Header to obtain the source geographic site for each stream.
- Read T_E_Waste_Stream_Header to obtain the waste type (E_WSH_Waste_Type_Name), and generating program (E_WSH_Gen_Prog_Code) for each stream.
- For each stream, read the E_WSAA_source_FYXXXX volumes from WS_Activity_Annual (where XXXX equals the most current year where actual quantities exist).
- Sum up all stream volumes that have the same waste type and generating program, within each source site.

- For the SNF section, volumes will be reported in Metric Tons of Heavy Metal.

- The Total Row represents the sum of all volumes reported for each site within a DOE program (down the column).

- Make sure units appear on the headers for each waste type.

- If "Unspecified" waste types are migrated (E_WSH_Waste_Type_Name = "UNSP") these should be included in the "Other" column and the footnote should state that the other column includes 11e2 and unspecified waste. If it is not migrated, the footnote should be adjusted to remove the reference to unspecified waste.

Record Selection:

N/A

Sort and Group:

Sort Order:	**Group Order:**
Waste Type	Waste Type
Generating Program	Generating Program
Site	Site

Report Sum-2: Annual Amounts of Waste Generation

Description:

This report summarizes the amounts of waste generated or projected to be generated, by waste type, for each year beginning with the current year (actuals), and projected for 10 years following the most current year. Quantities are presented for each waste type.

Applicable Records:

All records in T_E_WS_Activity_Header where E_WSAH_source_WS_activity_code is equal to "GEN". For this set of waste streams, exclude waste stream records that have a value in the Parent_WS_Code field of the T_E_Waste_Stream_Header, and exclude records where the unit name associated with the amount(s) is equal to "number of tanks"(NT) or "number of items" (NI).

Applicable Tables:

T_E_Waste_Stream_Header, T_E_WS_Activity_Header, T_E_WS_Activity_Annual, tx_Src_WS_Activity

Special Calculations/Formatting:

- After "GEN" waste streams are identified, read T_E_Waste_Stream_Header to obtain the waste type for each stream.
- For each stream, print each E_WSAA_source_FYXXXX volumes from T_E_WS_Activity_Annual (where XXXX equals the most current year and each year following up to 10 years).
- Sum up all stream volumes that have the same waste type that have “GEN” records in the same year.
- If “unspecified” waste type records are migrated, include those records in the “Other” row and indicate in the footnote that “other” includes unspecified and 11e2 waste. If “unspecified” waste type records are not migrated, adjust the footnote accordingly.
- For SNF section, volumes will be reported in Metric Tons of Heavy Metal.
- The Total column represents the sum of all quantities for each waste type (across the row).

Record Selection:

N/A

Sort and Group:

Sort Order:	**Group Order:**
Year	Year
Waste Type	Waste Type

Report Sum-3: DOE Current Year Waste and SNF Inventories by Site

Description:

This report summarizes quantities of waste in storage (inventory) at all sites across the DOE complex. The associated curie amount is also presented for each inventory quantity. Quantity and curie data are organized by waste type for each DOE site.

Applicable Records:

All waste stream records in T_E_WS_Activity_Annual for inv_FYXXXX (where XXXX is equal to the most current year where actual quantities are available). For this set of waste streams, exclude waste stream records that have a value in the Parent_WS_Code field of the WasteStreamHeader, and exclude records where the unit name associated with the amount(s) is equal to "# of tanks"(NT) or "number of items" (NI).

Applicable Tables:

T_E_Waste_Stream_Header, T_E_WS_Activity_Header, T_E_WS_Activity_Annual, txWS_Activity

Special Calculations/Formatting:

- The most current year where actuals are available should be used and designated at the beginning of the report.
- After current year inventory volumes are identified in T_E_WS_Activity_Annual table, read T_E_Waste_Stream_Header for each waste stream to obtain the waste type (E_WSH_Waste_Type_Name) and reporting (inventory) geographic site (E_WSH_Geo_Site_Name).
- Sum the inv_FYXXXX volumes for each site and waste type combination.
- For the HLW column, include only those HLW waste streams where the quantity is reported in cubic meters.
- For the HLW-Vitrified column, include only those HLW streams where the quantity is reported in # of HLW canisters.

- If records of “unspecified” waste type (E_WSH_Waste_Type_Name = “UNSP”) are migrated, include these in the “Other” column and update the footnote to note that unspecified and 11e2 waste are included. If these records are not migrated, update the footnote to only include 11e2 in the Other column.

- The "Curies" column specifications can not be completed. There are no data available for total curies in the 1998 data set. We are working on coming up with derivation algorithms. This may or may not work. Leave column blank for now.

- The Total Row represents the sum of all volumes reported for each site and waste type (down the column).

Record Selection:

N/A

Sort and Group:

Sort Order:	**Group Order:**
Waste Type	Waste Type
Site	Site

Report Sum-4: DOE Current Year Waste and SNF Inventories by Program

Description:

This report summarizes quantities of waste in storage (inventory) at all sites across the DOE complex. The associated curie amount is also presented for each inventory quantity. Quantity and curie data are presented for each DOE program generating the waste by waste type.

Applicable Records:

All waste stream records in T_E_WS_Activity_Annual for inv_FYXXXX (where XXXX is equal to the most current year where actual quantities exist). For this set of waste streams, exclude waste stream records that have a value in the Parent_WS_Code field of the T_E_Waste_Stream_Header, and exclude records where the unit name (E_WSH_Unit_Name) associated with the amount(s) is equal to "# of tanks" (NT) or "number of items" (NI).

Applicable Tables:

T_E_Waste_Stream_Header, T_E_WS_Activity_Header, T_E_WS_Activity_Annual, txWS_Activity

Special Calculations/Formatting:

- The most current year where actuals are available should be used and designated at the beginning of the report.
- After current year inventory volumes are identified in T_E_WS_Activity_Annual table, read T_E_Waste_Stream_Header to get the DOE generating program (E_WSH_Gen_Prog_Code) associated with the waste stream, and the waste type (E_WSH_Waste_Type_Name) associated with the stream..
- Sum the inv_FYXXXX (where XXXX equals the most current year where actual quantities exist) values for each generating program and waste type combination.
- For the HLW column, include only those HLW waste streams where the quantity is reported in cubic meters.
- For the HLW-Vitrified column, include only those HLW streams where the quantity is reported in # of HLW canisters (NC).
- For SNF section, volumes will be reported in Metric Tons of Heavy Metal.

- If records of “unspecified” waste type (E_WSH_Waste_Type_Name = “UNSP”) are migrated, include these in the “Other” column and update the footnote to note that unspecified and 11e2 waste are included. If these records are not migrated, update the footnote to only include 11e2 in the Other column.

- The "Curies" column specifications can not be completed. There are no data available for total curies in the 1998 data set. We are working on coming up with derivation algorithms. This may or may not work. Leave column blank for now.

- The Total Row represents the sum of all the waste type volumes reported for each DOE program (down the column).

Record Selection:

N/A

Sort and Group:

Sort Order:	**Group Order:**
Waste Type	Waste Type
Generating Program	Generating Program

Report Sum-5: DOE Waste and SNF Management Activities for the Current Year

Description:

This report summarizes the management activities (i.e. treatment, disposal, etc) for the current year (i.e the most recent year's actual data in the Central Internet Database) for each waste type across the DOE complex. Quantities are presented for each management activity and waste type. Spent nuclear fuel quantities are presented for the unique spent nuclear fuel management activities.

Applicable Records:

All waste stream records in T_E_WS_Activity_Annual for disp_FYXXXX (where XXXX is equal to the most current year where actual quantities exist). For this set of waste streams, exclude waste stream records that have a value in the Parent_WS_Code field of T_E_Waste_Stream_Header, and exclude records where the unit name associated with the amount(s) is equal to "# of tankss"(NT) or "number of items" (NI).

Applicable Tables:

T_E_Waste_Stream_Header, T_E_WS_Activity_Header, T_E_WS_Activity_Annual, tx_Disp_WS_Activity

Special Calculations/Formatting:

- The most current year where actuals are available should be used and designated at the beginning of the report.
- After disposition volumes are identified from T_E_WS_Activity_Annual table, read the WS_Activity_Header table to get the activity code associated with the current year disposition volume (T_E_WSAH_disp_WS_Activity_Code). Read tx_Disp_WS_Activity to get the activity category code associated with each T_E_WSAH_disp_WS_Activity_Code. Read T_E_Waste_Stream_Header for each waste stream to obtain the waste type (E_WSAH_Waste_Type_Name).

- For the “In Situ Managed” column, sum all of the E_WSH_Contam_Media_Volume fields in T_E_Waste_Stream_Header for each waste type, for streams where the E_WSAH_Disp_WS_Activity_Code in T_E_WS_Activity_Header is equal to “INSIT”.

- For all other columns except “In Situ Managed” in the non-SNF aggregation (waste types except SNF), sum the E_WSAA_disp_FYXXXX volumes for each waste type according to the following:

Activity Category Code:	Report Column:
TRT	Treatment
DISP	Disposal
TBD	To Be Determined
OTHPR, NPDES, RECY, RRU	Other Processing

- For the HLW row, include only those HLW waste streams where the quantity is reported in cubic meters.

- For the HLW-Vitrified row, include only those HLW streams where the quantity is reported in # of HLW canisters.

- For the SNF aggregation, use records where E_WSH_waste_type_name in T_E_Waste_Stream_Header = “SNF”.

- The "On Site Treatments" column is a summation of streams of all E_WSAA_SNFTRT_FYXXXX (where XXXX is the most current year actual) stream volumes in T_E_WS_Activity_Annual where E_WSAH_Disp_WS_activity_code in T_E_WS_Activity_Header = "TRTSF".

- The "Ship to Other DOE Site for Management/Storage" column is a summation of streams of all E_WSAA_disp_FYXXXX (where XXXX is the most current year actual) volumes in T_E_WS_Activity_Annual where the E_WSAH_disp_WS_activity_code in T_E_WS_Activity_Header is NOT equal to "DISP" and where the E_WSAH_disp_geo-site_code is different from the E_WSH_Geo_Site_Code in Waste_Stream_Header.

- The "Ship for Final Disposal" column is a summation of streams of all E_WSAA_disp_FYXXXX (where XXXX is the most current year actual) volumes in T_E_WS_Activity_Annual where the E_WSAH_disp_WS_activity_code in T_E_WS_Activity_Header = "DISP" and where the E_WSAH_disp_geo_site_code is different from the E_WSH_Geo_Site_Code in Waste_Stream_Header.

- The second "Total" column is the summation of the “On Site Treatment”, “Ship to Other DOE Site for Management/Storage”, and “Ship for Final Disposition” columns.

- For SNF section, volumes will be reported in Metric Tons of Heavy Metal.

- If records of “unspecified” waste type (E_WSH_Waste_Type_Name = “UNSP”) are migrated, include these in the “Other” column and update the footnote to note that unspecified and 11e2 waste

are included. If these records are not migrated, update the footnote to only include 11e2 in the Other column.

- The "Curies" column specifications can not be completed. There are no data available for total curies in the 1998 data set. We are working on coming up with derivation algorithms. This may or may not work. Leave column blank for now.

- The Total Column represents the sum of all the waste type volumes reported for each activity (across the row).

Record Selection:

N/A

Sort and Group:

Sort Order:	**Group Order:**
Management Activity	Management Activity
Waste Type	Waste Type

Report Sum-6: DOE Current Year Shipping and Receiving Activity

Description:

This report summarizes waste and spent nuclear fuel shipments across the DOE complex for the current year (i.e the most recent year's actual data in the Central Internet Database). There are seven DOE sites that receive waste: Hanford, Idaho National Environmental Engineering Laboratory, Los Alamos, Oak Ridge, Savannah River, Nevada Test Site, and the Waste Isolation Pilot Plant. Commercial sites also receive DOE waste and reported under the "Commercial" section, where applicable. If DOE sites plan on shipping waste but have not yet determined which DOE site will receive the waste, these quantities are reported under the "To Be Determined (TBD)" section. Quantities are presented for each receiving site, by shipping site and waste type.

Applicable Records:

All records in T_E_WS_Activity_Annual where there are receipts or dispositions to/from other geographic sites.

Applicable Tables:

T_E_Waste_Stream_Header, T_E_WS_Activity_Header, T_E_WS_Activity_Annual, txWS_Activity

Special Calculations/Formatting:

- The most current year where actuals are available should be used and designated at the beginning of the report.
- The valid Receiving Sites (report sections) are: Hanford (HASI), Idaho (INEL), Los Alamos (LANL), Oak Ridge (ORTN), Savannah River Site (SARS), Nevada Test Site (NVTS), Waste Isolation Pilot Plant (WIPP), Commercial and Other DOE Sites(COMM), and TBD Site (TBD).
- For all Receiving Sites EXCEPT Commercial and TBD Site: For all waste stream records, read T_E_Waste_Stream_Header to obtain the geographic site (E_WSH_Geo_Site_Code) to obtain all waste streams where the E_WSH_geo_site_code is equal to one of the valid receiving sites. Also obtain the waste type (E_WSH_Waste_Type_Name) for each stream.
- For each waste stream, read T_E_WS_Activity_Header table to obtain E_WSAH_Source_Geo_Site_Code. If the source_geo_site code is different from the receiving site (geo_site_code), this is a shipping site. Exclude waste streams where the Geographic Site Category (S_Site_Geo_Site_Cateogry in T_S_Site table) of E_WSAH_Source_Geo_Site_Code is "COMM" and where it is "TBD" .

- For each shipping and receiving site pair, read T_E_WS_Activity_Annual to get the E_WSAA_source_FYXXXX (where XXXX = the most current year where actual quantities exist) values and sum these volumes for each waste type.

- For Commercial Receiving Site: Read T_E_WS_Activity_Header to identify waste streams where the Geographic Site Category (S_Site_Geo_Site_Category from the T_S_Site table) of E_WSAH_Disp_Geo_Site_Code is equal to "COMM", or S_Site_Geo_Site_Category is = N-DOE and the E_WSAH_Disp_Geo_Site_Code is not “DOE”. These are commercial receiving sites or non-reporting DOE sites. The shipping sites will be E_WSH_Geo_Site_Code from T_E_Waste_Stream_Header. Pick up the waste type(E_WSH_Waste_Type_Name) from T_E_Waste_Stream_Header for each stream.

- For each pair of shipping and COMM sites, read T_E_WS_Activity_Annual for each stream and sum the E_WSAA_disp_FYXXXX (where XXXX = the most current year where actual quantities exist) values for each waste type.

- For TBD Receiving Site: Read T_E_WS_Activity_Header table to identify waste streams where the where the Geographic Site Category (S_Site_Geo_Site_Category from the T_S_Site table) of E_WSAH_Disp_Geo_Site_Code is equal to "TBD" or where S_Site_Geo_Site Category is equal to “N-DOE” and E_WSAH_Disp_Geo_Site_Code is = “DOE”. These are "to be determined" receiving sites. The shipping sites will be E_WSH_Geo_Site_Code from T_E_Waste_Stream_Header. Pick up waste type (E_WSH_Waste_Type_Name) from T_E_Waste_Stream_Header for each stream.

- For each pair of shipping and TBD sites, read T_E_WS_Activity_Annual for each stream and sum the E_WSAA_disp_FYXXXX (where XXXX = the most current year where actual quantities exist) for the each waste type.
- Waste Type specifications:
  - The HLW column should be populated only with records where waste type is HLW and units are cubic meters (m3).
  - The HLW-Vitrified column should be populated only with records where the waste type is HLW and units are # of HLW Canisters (NC).
  - If records with a waste type of unspecified (UNSP) are migrated, these records should be included in the Other Column and footnote should indicate that unspecified and 11e2 waste is included in the other column. If records with unspecified waste type are not migrated, adjust the footnote to include only 11e2 waste.
  - Spent Nuclear fuel quantity units are reported in metric tons of heavy metal (MTHM)

- The "Curies" column specifications can not be completed. We are working on coming up with derivation algorithms. This may or may not work. Leave column blank for now.

Record Selection:

N/A

Sort and Group:

Sort Order:	**Group Order:**
Receiving Site	Receiving Site
Waste Type	Waste Type
Shipping Site	Shipping Site

Report Sum-7: DOE Annual Amounts of Waste and SNF in Inventory

Description:

This report summarizes the amounts of waste in inventory (storage) or projected to be in inventory, by waste type, for each year beginning with the most current year actuals quantities and projected quantities for 10 years following the most current year. Quantities are presented for each waste type.

Applicable Records:

All waste stream records in T_E_WS_Activity_Annual for quantities in E_WSAA_inv_FYXXXX (where XXXX is equal to the most current year where actual quantities exist plus 10 years out from the most current year). For this set of waste streams, exclude waste stream records that have a value in the Parent_WS_Code field of T_E_Waste_Stream_Header, and exclude records where the unit name (E_WSH_Unit_Name) associated with the amount(s) is equal to "# of tanks"(NT) or "number of items" (NI).

Applicable Tables:

T_E_Waste_Stream_Header, T_E_WS_Activity_Header, T_E_WS_Activity_Annual, txWS_Activity

Special Calculations/Formatting:

- After inventory fields are identified, read T_E_Waste_Stream_Header to obtain the waste type (E_WSH_Waste_Type_Name) for each stream.
- For each stream, print each E_WSAA_inv_FYXXXX volumes from T_E_WS_Activity_Annual (where XXXX equals the most current year where actual quantities exist and each year following up to 10 years). Sum up all stream inventory volumes that have the same waste type occurring in the same year.
- For SNF row, volumes will be reported in Metric Tons of Heavy Metal.
- For the HLW row, include only those HLW waste streams where the quantity is reported in cubic meters.
- For the HLW-Vitrified row, include only those HLW streams where the quantity is reported in # of HLW canisters.
- If records with a waste type of unspecified (UNSP) are migrated, these records should be included in the Other Column and footnote should indicate that unspecified and 11e2 waste is included in the other column. If records with unspecified waste type are not migrated, adjust the footnote to include only 11e2 waste.
- The Total column represents the sum of all quantities for each waste type (across the row).

Record Selection:

N/A

Sort and Group:

Sort Order:	**Group Order:**
Year	Year
Waste Type	Waste Type

Report Sum-8: Comprehensive Site Profile Report

Description:

Shows summary data (most current year) for a site across all data sets

Applicable Records:

All CID database fields applicable to the selected site

If a waste stream has a parent record, do not include the parent.

Applicable Tables:

T_F_Property, T_F_Stored_NM, T_E_Waste_Stream_Header, T_E_WS_Activity_Header, T_E_WS_Activity_Annual, tx_Src_WS_Activity, tx_Disp_WS_Activity, T_W_Waste_Gen_Rpt, T_M_Material, T_T_TRI

Special Calculations/Formatting:

- The most current year where actuals are available should be used and designated at the beginning of the report.

- The report provides a profile for a selected site using the most current year where actual data is available. The report is divided into the following sections:

  For Contaminated facilities information, there are three sub-tables:

  – For the first sub-table, read each record in T_F_PROPERTY. The "Facility Status" table is a list of all the valid values from the T_F_PROP_BLD_CMST_DESC field of the T_F_PROPERTY table. The T_F_PROP_BLD_CMST_DESC values correspond to the following types of "Facility Status":

    1 - Operating

    2 - Operational Standby

    3 - Shutdown Pending Transfer

    4 - Shutdown Pending D&D

    5 - D&D in Progress

    6 - No Information Provided

Count the facilities for the site that have the same status value and provide the count in the sub-table by status. Repeat for each valid value for each Facility Status. If the status field is blank, count the record in the status category of "No Information Provided".

– For the second sub-table, the "Facility Contaminant Type" column is a list of all the valid values from the F_PROP_CONTAM_NAME field of the T_F_PROPERTY table. The F_PROP_CONTAM_NAME values correspond to the following Facility Contaminant Types:

N: No Contamination

R: Radiological Contamination

C: Chemical Contamination

B: Both Radiological and Chemical Contamination

No Information Provided

Count the facilities for the site that have the same Property Contaminant Type and provide the count in the sub-table. Repeat for each valid value for Property Contaminant. If the contamination field is blank, count the record in the category "No Information Provided".

– For the third sub-table, the "Type Of Nuclear Material/Waste Present in Facility" column is a list of all the valid values from the F_SNM_HAZ_NAME field of the T_F_STORED_NM table. The "Number of Facilities" column is a direct pull of F_SNM_NMW_FACS from the T_F_STORED_NM table.

For Radioactive Waste Summary:

- Identify the Radioactive Waste Records by selecting all waste streams where T_E_Waste_Stream_Header attribute E_WSH_in_situ_ stream = N and where attribute E_WSH_Ex_Situ_Stream = N, and where E_WSH_Waste_Type_Name NOT equal to "SNF". Also exclude streams where the volume units are in "number of tanks" (NT) or "number of items" (NI)
- The "Starting Inventory" column displays, by waste type, E_WSAA_inv_FYXXXX (where XXXX equals the current year actual data minus one FY) for the selected site. (For example, starting inventory for a reporting year of FY1998 would display starting inventory volumes for FY1997.)
- The "New" column is a summation, by waste type, of all the E_WSAA_source_FYXXXX (where "XXXX" equals the current year actual data) values in the T_E_WS_Activity_Annual table for all waste stream where the WS_ACTIVITY_CATEGORY_CODE (from tx_Src_WS_Activity) of the WSAH_source_WS_activity_code = "GEN".
- The "Process Output" column is a summation, by waste type, of all the E_WSAA_source_FYXXXX (where "XXXX" equals the most current year) values in the T_E_WS_Activity_Annual table for all waste streams for each waste type where the WS_ACTIVITY_CATEGORY_CODE (from tx_Src_WS_Activity) of the WSAH_source_WS_activity_code = "SEC".
- The "Receipts" column is a summation, by waste type, of all the E_WSAA_source_FYXXXX (where "XXXX" equals the most current year) values in the T_E_WS_Activity_Annual table for all waste streams for each waste type where the WS_ACTIVITY_CATEGORY_CODE (from tx_Src_WS_Activity) of the WSAH_source_WS_activity_code = "RCPT".
- The "Treatment Volume" column is a summation, by waste type, of all the E_WSAA_disp_FYXXXX (where "XXXX" equals the most current year) values in the T_E_WS_Activity_Annual table for all

waste streams for each waste type where the WS_ACTIVITY_CATEGORY_CODE (from tx_Disp_WS_Activity) of the WSAH_disp_WS_activity_code = "TRT".

- The "Disposal Volume" column is a summation, by waste type, of all the E_WSAA_disp_FYXXXX (where "XXXX" equals the most current year) values in the T_E_WS_Activity_Annual table for all waste streams for each waste type where the WS_ACTIVITY_CATEGORY_CODE (from tx_Disp_WS_Activity) of the WSAH_disp_WS_activity_code = "DISP".
- The "Other" column is a summation, by waste type, of all the disp_FYXXXX (where "XXXX" equals the most current year) values in the WS_Activity_Annual table for all waste streams for each waste type where the WS_ACTIVITY_CATEGORY_CODE (from tx_Disp_WS_Activity) of the WSAH_disp_WS_activity_code = "OTHPR", "RECY", "RRU", "NPDES".
- The "Ending Inventory" column is computed, by waste type, through "Starting Inventory + Reporting Period Generation Volume (New, Secondary, Receipts) - Reporting Period Disposition Volume (Treatment, Disposal). You have to calculate this way since we are leaving out TBD quantities.

For Spent Nuclear Fuel Summary:

- Identify the Spent Nuclear Fuel records by selecting all waste streams where T_E_Waste_Stream_Header attribute E_WSH_Waste_Type_Name = "SNF". Also exclude streams where the volume units are in cubic meters (m3).

- The "Starting Inventory" column is a summation of streams for the selected site of all E_WSAA_inv_FYXXXX (where XXXX equals the most current year minus 1) SNF stream volumes in T_E_WS_Activity Annual.

- The "On Site Generation" column is a summation of streams for the selected site, of all E_WSAA_source_FYXXXX (where XXXX is the most current year actuals) SNF stream volumes in T_E_WS_Activity_Annual where the E_WSAH_source_WS_activity_code in T_E_WS_Activity_Header = "GEN".

- The "Off-Site Receipts" column is a summation of streams, for the selected site, of all E_WSAA_source_FYXXXX (where XXXX is the most current year actuals) SNF stream volumes in T_E_WS_Activity_Annual where E_WSAH_source_WS_activity_code in T_E_WS_Activity_Header = "RCPT".

- The "Total" Column is the summation, by site, of the starting inventory, on-site generation, and off-site receipt quantities.

- The "On Site Treatments" column is a summation of streams for the selected site, of all E_WSAA_SNFTRT_FYXXXX (where XXXX is the most current year actuals) stream volumes in T_E_WS_Activity_Annual where E_WSAH_Disp_WS_activity_code in T_E_WS_Activity_Header = "TRTSF".

- The "Ship to Other DOE Site for Management/Storage" column is a summation of streams for the selected site of all E_WSAA_disp_FYXXXX (where XXXX is the most current year actuals) SNF stream volumes in T_E_WS_Activity_Annual where the E_WSAH_disp_WS_activity_code in T_E_WS_Activity_Header is NOT equal to "DISP" and where the E_WSAH_disp_Geo Site_code is different from the E_WSH_Geo_Site_Code in Waste_Stream_Header.

- The "Ship for Disposal" column is a summation of streams, for the selected site, of all E_WSAA_disp_FYXXXX (where XXXX is the most current year actuals) SNF stream volumes in T_E_WS_Activity_Annual where the E_WSAH_disp_WS_activity_code in T_E_WS_Activity_Header = "DISP" and where the E_WSAH_disp_geo_site_code is different from the E_WSH_Geo_Site_Code in Waste_Stream_Header.

- The second "Total" column is the summation, by site, of the “On Site Treatment”, “Ship to Other DOE Site for Management/Storage”, and “Ship for Final Disposition” columns.

Ex-Situ Media:

- Identify the Ex-Situ contaminated media records by selecting all waste streams for the site where T_E_Waste_Stream_Header attribute E_WSH_In_Situ_ Stream = N, where attribute E_WSH_waste_type_name is NOT equal to "SNF," and where attribute E_WSH_Ex_Situ_Stream = Y. In addition, attribute "Unit_Name" is NOT = "# of units" or "number of items."
- The "Reporting Period Additions" column is a summation, by waste type, of all the WSAA_source_FYXXXX (where "XXXX" equals the most current year) values in the T_E_WS_Activity_Annual table for all waste stream where the WS_ACTIVITY_CATEGORY_CODE (from tx_Src_WS_Activity) of the WSAH_source_WS_activity_code = "ERGEN”.

- The logic for other additions, treatment and disposition is the same as for the radioactive waste summary section (No HLW row, and no HLW-Vitrified row).

In-Situ Media:

- Identify the In-Situ contaminated media records by selecting all waste streams for the site where the is_insitu_stream attribute in the WasteStreamHeader table = "Y".
- The "In-Situ Treatment" column is a summation of all E_WSH_Contam_Media_Volume fields where in the Waste_Stream_Header table for each waste type where the WSAH_disp_WS_activity_code = "ISTRT".
- The "In-Situ Containment" column is a summation of all summation of all E_WSH_Contam_Media_Volume fields where in the Waste_Stream_Header table for each waste type where the WSAH_disp_WS_activity_code = "ISCON".
- The "Access/Institutional Control" column is a summation of all summation of all E_WSH_Contam_Media_Volume fields where in the Waste_Stream_Header table for each waste type where the WSAH_disp_WS_activity_code = "ACCIC".

- The "No Action" column is a summation of all summation of all E_WSH_Contam_Media_Volume fields where in the Waste_Stream_Header table for each waste type where the WSAH_disp_WS_activity_code = "NOACT".
- Reporting Year total volume is computed by adding each management strategy for each waste type (sum across the row).

Non-Radioactive Hazardous Waste:

- Sum all waste streams volumes in T_W_Waste_Gen_Rpt for the current reporting year for the selected site based on the following categories (See NRAD-1 and NRAD-2 spec if more detail on database field names is required):

  - Non-Routine RCRA
  - Routine RCRA
  - Non-Routine State
  - Routine State
  - Non-Routine TSCA
  - Routine TSCA
  - Non-Routine Sanitary
  - Routine Sanitary

Buried TRU (ON HOLD):

- Sum totals for "Total Volume Actual Waste Emplaced," "Total Volume Containers Emplaced," and "Total Volume Contaminated Soil" for every record where "Placement" = (1) Trench/Pit Burial (emplaced waste only), (2) Greater Confinement Disposal (emplaced waste only), (3) Underground Injection (emplaced waste only), (4) Spill or Surface Discharge (emplaced waste AND contaminated soil), (5) Surface Testing (soil only), (6) Underground Testing (soil only), and (7) Other (emplaced waste AND contaminated soil).

Materials in Inventory:

- Using T_M_Material, find all records where the M_Mat_Site_Name is equal to the selected site.
- For each record print each Min Material (M_Mat_Name), MIN category (M_Mat_Cat_Name) and inventory volume (M_Mat_Inv_Amt). The units (M_Mat_Unit_Name) should be printed next to all inventory amounts.
- Total field is computed by summing the volumes for each Min Material (down the column)
- Table should clearly indicate the information is from 1996.

Toxic Chemicals:

- Read T_T_TRI and find all records where T_TRI_Fac_Name is equal to the selected site.

- For each chemical for that site (T_TRI_Chem_Name) for the most current reporting year, group the quantity data into the following categories:

  On Site Releases: Total of the following for the current year:

  T_TRI_CROS_Fugitive_Air_Emis, T_TRI_CROS_Stack_Air_Emis, T_TRI_CROS_Discharge_Rcv_Strm, T_TRI_CROS_On-Site_UGrnd_Inj, and T_TRI_CROS_Land_Release.

  Off Site Transfers: Total of the following for the current year:

  T_TRI_OSX_Tot_Xfer_Other, T_TRI_OSX_Tot_Xfer_POTWs

  Source Reduction, Recycling and Waste Management: Total of the the following for the current year:

  T_TRI_RWM_Qty_Rel_EPCRA, T_TRI_RWM_Qty_On_Site_E_Recov, T_TRI_RWM_Qty_Off_Site_E_Recov, T_TRI_RWM_Qty_On_Site_Recycle, T_TRI_RWM_Qty_Off_Site_Recycle, T_TRI_RWM_Qty_On_Site_Treat, T_TRI_RWM_Qty_Off_Site_Treat, T_TRI_RWM_Qty_Rel_Non_Prod.

Record Selection:

The user should be able to select one site from a valid list of all sites for the DOE complex. The SUM-8 will be presented in PDF format for that selected site.

Sorting/Grouping:

N/A

Report Sum-9: Program Profile Report

Description:

Shows summary data for a program across all data sets

Applicable Records:

All CID database information where the DOE program is equal to the program report selected by the user. Valid programs should be EM, DP, SC, NE. Match the program report selected to the following fields:

- For contaminated facilities, use F_Prop_Man_Prog_Code from T_F_Property.
- For Radioactive Waste, Ex-Situ Contaminated Media, and In-Situ Contaminated Media use E_WSH_Gen_Prog_Code from T_E_Waste_Stream_Header.

Waste streams that have a value in the Parent_WS_Code field of the WasteStreamHeader table will be excluded.

Applicable Tables:

T_F_PROPERTY, T_E_Waste_Stream_Header, T_E_WS_Activity_Header, T_E_WS_Activity_Annual, txWS_Activity.

Special Calculations/Formatting:

- The most current year where actuals are available should be used and designated at the beginning of the report.
- The report is divided into the following sections:

Contaminated facilities information:

- For the first sub-table, read the T_F_PROP_BLD_CMST_DESC in T_F_Property table for the all facilities with selected program. Count the number of facilities for the selected program that have the same status value and provide the count in the sub-table by status as follows:

  1 - Operating

  2 - Operational Standby

  3 - Shutdown Pending Transfer

  4 - Shutdown Pending D&D

5 - D&D in Progress

6 - No Information Provided

If the status field is blank, count the record in the status category of “No Information Provided”.

- For the second sub-table, the “Facility Contaminant Type” column is a list of all the valid values from the F_PROP_CONTAM_NAME field of the T_F_PROPERTY table. The F_PROP_CONTAM_NAME values correspond to the following Facility Contaminant Types:

  N: No Contamination

  R: Radiological Contamination

  C: Chemical Contamination

  B: Both Radiological and Chemical Contamination

  No Information Provided

  Count the facilities for the program that have the same Property Contaminant Type and provide the count in the sub-table. Repeat for each valid value for Property Contaminant. If the contamination field is blank, count the record in the category “No Information Provided”.

Radioactive Waste information:

- For the selected program, identify the Radioactive Waste Records by selecting all waste streams where T_E_Waste_Stream_Header attribute E_WSH_In_Situ_ Stream = N, where attribute E_WSH_waste_type_name is NOT equal to "SNF," and where attribute E_WSH_Ex_Situ_Stream = N. In addition, attribute "Unit_Name" is NOT = "# of tanks” (NT) or "number of items" (NI).

- The "Starting Inventory" column is a sum of the E_WSAA_inv_FYXXXX (where "XXXX" equals the most current year of actuals minus 1) values in the T_E_WS_Activity_Annual table for all waste streams generated by the selected program, and aggregated by waste type.

- The "New" column is a sum of all the E_WSAA_source_FYXXXX (where "XXXX" equals the most current actual year) values in the T_E_WS_Activity_Annual table for all waste stream generated by the selected program, where the WS_ACTIVITY_CATEGORY_CODE (from tx_Src_WS_Activity) of the WSAH_source_WS_activity_code = "GEN".

- The "Process Outputs" column is a sum of all the E_WSAA_source_FYXXXX (where "XXXX" equals the most current year) values in the T_E_WS_Activity_Annual table for all waste streams generated by the selected program, where the WS_ACTIVITY_CATEGORY_CODE (from tx_Src_WS_Activity) of the WSAH_source_WS_activity_code = "SEC".

- The "Receipts" column is a sum of all the E_WSAA_source_FYXXXX (where "XXXX" equals the most current actual year) values in the T_E_WS_Activity_Annual table for all waste streams

generated by the selected program, where the WS_ACTIVITY_CATEGORY_CODE (from tx_Src_WS_Activity) of the WSAH_source_WS_activity_code = "RCPT".

- The "Treatment Volume" column is a sum of all the E_WSAA_disp_FYXXXX (where "XXXX" equals the most current actual year) values in the T_E_WS_Activity_Annual table for all waste streams generated by the selected program, where the WS_ACTIVITY_CATEGORY_CODE (from tx_Disp_WS_Activity) of the WSAH_disp_WS_activity_code = "TRT". disp_WS_activity_code = "TRT". For SNF streams, you need to use the WSAH_disp_WS_Activity_code = SFTRT.

- The "Disposal Volume" column is a sum of all the E_WSAA_disp_FYXXXX (where "XXXX" equals the most current actual year) values in the T_E_WS_Activity_Annual table for all waste streams generated by the selected program, where the WS_ACTIVITY_CATEGORY_CODE (from tx_Disp_WS_Activity) of the WSAH_disp_WS_activity_code = "DISP" or “TRDI”.

- The “Other Processing” column is a sum of all of the E_WSAA_disp_FYXXXX (where “XXXX” equals the most current actual year) values in the T_E_WS_Activity_Annual table for all waste streams generated by the selected program, where the WS_ACTIVITY_CATEGORY_CODE (from tx_Disp_WS_Activity) of the WSAH_disp_WS_activity_code = "NPDES" or "RRU" or "OTHPR" or "OSP" or "RECYC". For SNF Streams, you need to use the WSAH_disp_WS_Activity_code that is equal to “OTHPR”, “MOVE”, “SHIPD” or “PREP”.

- The "Ending Inventory" column is computed by summing "Starting Inventory + Reporting Period Generation Volume (New, Secondary, Receipts) - Reporting Period Disposition Volume (Treatment, Disposal, Other Processing).

Spent Nuclear Fuel Summary Information:

- The "Starting Inventory" column is a summation of streams for the selected programe of all E_WSAA_inv_FYXXXX (where XXXX equals the most current year minus 1) SNF stream volumes in T_E_WS_Activity Annual.

- The "On Site Generation" column is a summation of streams for the selected program of all E_WSAA_source_FYXXXX (where XXXX is the most current year actuals) SNF stream volumes in T_E_WS_Activity_Annual where the E_WSAH_source_WS_activity_code in T_E_WS_Activity_Header = "GEN".

- The "Off-Site Receipts" column is a summation of streams, for the selected site program of all E_WSAA_source_FYXXXX (where XXXX is the most current year actuals) SNF stream volumes in T_E_WS_Activity_Annual where E_WSAH_source_WS_activity_code in T_E_WS_Activity_Header = "RCPT", a nd where E_WSAH_source_geo_site_code is different from E_WSH_Geo_Site_Code in T_E_Waste_Stream_Header..

- The “Total” Column is the summation, by site, of the starting inventory, on-site generation, and off-site receipt quantities.

- The "On Site Treatments" column is a summation of streams for the selected program of all E_WSAA_SNFTRT_FYXXXX (where XXXX is the most current year actuals) stream volumes in T_E_WS_Activity_Annual where E_WSAH_Disp_WS_activity_code in T_E_WS_Activity_Header = "TRTSF".

- The "Ship to Other DOE Site for Management/Storage" column is a summation of streams for the selected program of all E_WSAA_disp_FYXXXX (where XXXX is the most current year actuals) SNF stream volumes in T_E_WS_Activity_Annual where the E_WSAH_disp_WS_activity_code in T_E_WS_Activity_Header is NOT equal to "DISP" and where the E_WSAH_disp_Geo Site_code is different from the E_WSH_Geo_Site_Code in Waste_Stream_Header.

- The "Ship for Disposal" column is a summation of streams, for the selected program of all E_WSAA_disp_FYXXXX (where XXXX is the most current year actuals) SNF stream volumes in T_E_WS_Activity_Annual where the E_WSAH_disp_WS_activity_code in T_E_WS_Activity_Header = "DISP" and where the E_WSAH_disp_geo_site_code is different from the E_WSH_Geo_Site_Code in Waste_Stream_Header.

- The second "Total" column is the summation, by site, of the “On Site Treatment”, “Ship to Other DOE Site for Management/Storage”, and “Ship for Final Disposition” columns.

Ex-Situ Contaminated Media information:

- Identify the Ex-Situ contaminated media records by selecting all waste streams for the site where WasteStreamHeader attribute "is_insitu_ stream" = N, where attribute "waste_type_code" is NOT equal to "SNF," and where attribute "is_ex-situ_media" = Y. In addition, attribute "Unit_Name" is NOT = "# of tanks (NT)" or "number of items" (NI).

- The "Starting Inventory" column is a sum of the E_WSAA_inv_FYXXXX (where "XXXX" equals the most current year-1) values in the T_E_WS_Activity_Annual table for all waste streams generated by the selected program, and aggregated by waste type.

- The "New" column is a sum of all the WSAA_source_FYXXXX (where "XXXX" equals the most current actual year) values in the T_E_WS_Activity_Annual table for all waste streams where the WS_ACTIVITY_CATEGORY_CODE (from tx_Src_WS_Activity) of the WSAH_source_WS_activity_code = "ERGEN.”

- All other computations for the ex situ media table follow the same rules as the radioactive waste table. Except there is no HLW and no SNF rows in this table.

In-Situ Contaminated Media information:

- Identify the In-Situ contaminated media records by selecting all waste streams for the site where the E_WSH_In_Situ_Stream attribute in the T_E_Waste_Stream_Header table = "Y".

- The "In-Situ Treatment" column is a sum of all summation of all E_WSH_Contam_Media_Volume fields in the Waste_Stream_Header table for each waste type where the WS_ACTIVITY_CATEGORY_CODE (from tx_Disp_WS_Activity) of the WSAH_disp_WS_activity_code = "ISTRT".

- The "In-Situ Containment" column is a sum of all summation of all E_WSH_Contam_Media_Volume fields where in the Waste_Stream_Header table for each waste type where the WS_ACTIVITY_CATEGORY_CODE (from tx_Disp_WS_Activity) of the WSAH_disp_WS_activity_code = "ISCON".

- The "Access/Institutional Control" column is a sum of all summation of all E_WSH_Contam_Media_Volume fields where in the Waste_Stream_Header table for each waste type where the WS_ACTIVITY_CATEGORY_CODE (from tx_Disp_WS_Activity) of the WSAH_disp_WS_activity_code = "ACCIC".

- The "No Action" column is a sum of all summation of all E_WSH_Contam_Media_Volume fields where in the Waste_Stream_Header table for each waste type where the WS_ACTIVITY_CATEGORY_CODE (from tx_Disp_WS_Activity) of the WSAH_disp_WS_activity_code = "NOACT".
- "Reporting Year Total Volume" is computed by adding each management strategy for each waste type (sum across the row).
- The total row is computed by adding all the values in the management activity for each waste type (down the column).

Record Selection:

The user should be able to select one program from a valid list of all programs of interest as referenced in the PEIS Settlement Agreement: EM, DP, SC, NE. The SUM-9 will be presented in PDF format for that selected program.

Sorting/Grouping:

N/A

Report Sum-10: State Profile Report

Description:

Shows summary data for a state across all data sets. The report provides a profile for a selected state using the most current reporting year's data.

Applicable Records:

To roll up data to the state level, take all information where the "State Name" field in the State table is equal to the State selected by the user. Read the following fields to match the selected state:

- Facilities data: S_State_Name in T_S_State where the Geo_Site_Name from T_S_Site is in the state selected by the user.
- Waste Data: S_State_Name in T_S_State where S_Site_State_Code in T_S_Site of the E_WSH_Geo_Site_Code is equal to the selected state.
- TRI Data: S_State_Name in T_S_State where S_Site_State_Code in T_S_Site of the T_TRI_Fac_Name is equal to the selected state.
- MIN Data: S_State_Name in T_S_State where S_Site_State_Code in T_S_Site of the M_Mat_Site_Num is equal to the selected state
- Waste Gen data: S_State_Name in T_S_State where S_Site_State_Code in T_S_Site of the W_WGR_Site_Num is equal to the selected state.

Waste streams that have a value in the Parent_WS_Code field of the WasteStreamHeader table will be excluded.

Applicable Tables:

T_S_State, T_F_Property, T_F_Stored_NM, T_E_Waste_Stream_Header, T_E_WS_Activity_Header, T_E_WS_Activity_Annual, txWS_Activity, T_T_TRI, T_W_Waste_Gen_Rpt, T_M_Material.

Special Calculations/Formatting:

- The most current year where actuals are available should be used and designated at the beginning of the report.

- The report is divided into the following sections:

Contaminated facilities information:

For Contaminated facilities information, there are three sub-tables:

– For the first sub-table, read each record in T_F_PROPERTY. The “Facility Status” table is a list of all the valid values from the T_F_PROP_BLD_CMST_DESC field of the T_F_PROPERTY table. The T_F_PROP_BLD_CMST_DESC values correspond to the following types of “Facility Status”:

1 - Operating

2 - Operational Standby -

3 - Shutdown Pending Transfer

4 - Shutdown Pending D&D

5 - D&D in Progress

6 - No Information Provided

Count the facilities for the state that have the same status value and provide the count in the sub-table by status. Repeat for each valid value for each Facility Status. If the status field is blank, count the record in the status category of “No Information Provided”.

– For the second sub-table, the “Facility Contaminant Type” column is a list of all the valid values from the F_PROP_CONTAM_NAME field of the T_F_PROPERTY table. The F_PROP_CONTAM_NAME values correspond to the following Facility Contaminant Types:

N: No Contamination

R: Radiological Contamination

C: Chemical Contamination

B: Both Radiological and Chemical Contamination

No Information Provided

Count the facilities for the state that have the same Property Contaminant Type and provide the count in the sub-table. Repeat for each valid value for Property Contaminant. If the contamination field is blank, count the record in the category “No Information Provided”.

– For the third sub-table, the “Type Of Nuclear Material/Waste Present in Facility” column is a list of all the valid values from the F_SNM_HAZ_NAME field of the T_F_STORED_NM table. The “Number of Facilities” column is a direct pull of F_SNM_NMW_FACS from the T_F_STORED_NM table.

Waste Transfer Information-Radioactive Waste:

– Identify the Radioactive Waste Records by selecting all waste streams where WasteStreamHeader attribute "is_insitu_ stream" = N and where attribute "is_ex-situ_media" = N. In addition, attribute "Unit_Name" is NOT = "# of units" or "number of items."

– The "Shipped to Out of State Sites" column is a sum, by waste type, of all the E_WSAA_disp_FYXXXX (where "XXXX" equals the most current actual year) values in the T_E_WS_Activity_Annual table for all waste streams of sites in the selected state where the E_WSAH_disp_geo_site_code in the T_E_WS_Activity_Header table and

E_WSH_geo_site_code in the T_E_Waste_Stream_Header table are not equal and E_WSAH_disp_geo_site_code is not in the state selected by the user, and E_WSAH_disp_geo_site_code does not equal "TBD".

- The "Generated" column is a sum, by waste type, of all the E_WSAA_source_FYXXXX (where "XXXX" equals the most current actual year) values in the T_E_WS_Activity_Annual table for all waste streams of sites in the selected state where the WS_ACTIVITY_CATEGORY_CODE (from tx_Src_WS_Activity) of the WSAH_source_WS_activity_code = "GEN" and the E_WSH_Geo_Site_Code in T_E_Waste_Stream_Header table is in the state selected by the user.

- **For Radioactive Waste and Ex Site Media "In-State Disposition":** column is a sum, by waste type, of all the E_WSAA_disp_FYXXXX (where "XXXX" equals the most current actual year) values in the T_E_WS_Activity_Annual table for all streams reported by sites in the selected state (where the state code (from T_S_Site) of the E_WSH_Geo_Site_Code in T_E_Waste_Stream_Header is equal to the selected state) where the WS_ACTIVITY_CATEGORY_CODE (from tx_Disp_WS_Activity) of the WSAH_disp_WS_activity_code = "DISP" or "TRT" or "NPDES" or "RRU" or "OTHPR" or "RECY" and the E_WSAA_disp_geo_site_code in the T_E_WS_Activity_Header table is the in the selected state.

- **For Spent Nuclear Fuel "In-State Disposition":** column is a sum of all the E_WSAA_SNFTRT_FYXXXX (where "XXXX" equals the most current actual year) values in the T_E_WS_Activity_Annual table for all waste streams of sites in the selected state (where the state code (from T_S_Site) of the E_WSH_Geo_Site_Code in T_E_Waste_Stream_Header is equal to the selected state) where the E_WSH_waste_type_name = “SNF” and the E_WSAH_disp_WS_activity_code in T_E_WS_Activity_Header = "TRTSF", and the E_WSAH_disp_geo_site_code in the T_E_WS_Activity_Header table is in the selected state and the S_Site_Geo_Site_Category (from T_S_Site) is not equal to “DOE” or “COMM” or “TBD”.

- The "Received from Out of State Sites" column is a sum, by waste type, of all the E_WSAA_source_FYXXXX (where "XXXX" equals the most current actual year) values in the T_E_WS_Activity_Annual table for all waste streams for sites in the selected state where the WS_ACTIVITY_CATEGORY_CODE (from tx_Src_WS_Activity) of the WSAH_source_WS_activity_code = "RCPT" and the E_WSAH_source_geo_site_code in the T_E_WS_Activity_Header is not in the same state as the E_WSH_geo_site_code in T_E_Waste_Stream_Header.

- The "Intrastate Shipments" column is a sum, by waste type, of all the E_WSAA_source_FYXXXX (where "XXXX" equals the most current actual year) values in the T_E_WS_Activity_Annual table for all waste stream for sites in the selected state where the WS_ACTIVITY_CATEGORY_CODE (from tx_Src_WS_Activity) of the WSAH_source_WS_activity_code = "RCPT" and where E_WSAH_source_geo_site_code in the T_E_WS_Activity_Header table and E_WSH_geo_site_code in T_E_Waste_Stream_Header are different, but both are in the state selected by the user.

Waste Transfer Information-Ex Situ Media:

- Identify the Ex-Situ contaminated media records by selecting all waste streams for sites in the state where WasteStreamHeader attribute "is_insitu_ stream" = N, where attribute "waste_type_code" is NOT equal to "SNF," and where attribute "is_ex-situ_media" = Y. In addition, attribute "Unit_Name" is NOT = "# of units" or "number of items."

- The logic for the Ex-Situ Media record is the same as for the Radiocative Waste Records, except the generated column. The "Generated" column is a sum, by waste type, of all the E_WSAA_source_FYXXXX (where "XXXX" equals the most current actual year) values in the T_E_WS_Activity_Annual table for all waste streams of sites in the selected state where the WS_ACTIVITY_CATEGORY_CODE (from tx_Src_WS_Activity) of the WSAH_source_WS_activity_code = "ERGEN" and the source_geo_site_code in the WS_Activity_Header table is in the state selected by the user.

In-Situ Contaminated Media Information:

- Identify the In-Situ contaminated media records by selecting all waste streams for the sites within the selected state where the is_insitu_stream attribute in the WasteStreamHeader table = "Y".

- The "In-Situ Treatment" column is a sum of all summation of all E_WSH_Contam_Media_Volume fields where in the Waste_Stream_Header table for each waste type where the WS_ACTIVITY_CATEGORY_CODE (from tx_Disp_WS_Activity) of the WSAH_disp_WS_activity_code = "ISTRT".

- The "In-Situ Containment" column is a sum of all summation of all E_WSH_Contam_Media_Volume fields where in the Waste_Stream_Header table for each waste type where the WS_ACTIVITY_CATEGORY_CODE (from tx_Disp_WS_Activity) of the WSAH_disp_WS_activity_code = "ISCON".

- The "Access/Institutional Control" column is a sum of all summation of all E_WSH_Contam_Media_Volume fields where in the Waste_Stream_Header table for each waste type where the WS_ACTIVITY_CATEGORY_CODE (from tx_Disp_WS_Activity) of the WSAH_disp_WS_activity_code = "ACCIC".

- The "No Action" column is a sum of all summation of all E_WSH_Contam_Media_Volume fields where in the Waste_Stream_Header table for each waste type where the WS_ACTIVITY_CATEGORY_CODE (from tx_Disp_WS_Activity) of the WSAH_disp_WS_activity_code = "NOACT"
- "Reporting Year Total Volume" is computed by adding each management strategy for each waste type (sum across the row).

– The total field sums the management strategies for each waste type (down the column).

Toxic Release Inventory Information:

– If no records exist for the current year for the selected state - put "NO SITES REPORTED IN SELECTED STATE FOR THIS YEAR" after the Toxic Release Inventory title.

– For all sites in the state selected by the user, sum the quantities reported in each of these fields from the T_T_TRI as follows:

On Site Releases: Total of the following for the current year: T_TRI_CROS_Fugitive_Air_Emis, T_TRI_CROS_Stack_Air_Emis, T_TRI_CROS_Discharge_Rcv_Strm, T_TRI_CROS_On-Site_UGrnd_Inj, and T_TRI_CROS_Land_Release.

Off Site Transfers: Total of the following for the current year: T_TRI_OSX_Tot_Xfer_Other, T_TRI_OSX_Tot_Xfer_POTWs

Source Reduction, Recycling and Waste Management: Total of the the following for the current year: T_TRI_RWM_Qty_Rel_EPCRA, T_TRI_RWM_Qty_On_Site_E_Recov, T_TRI_RWM_Qty_Off_Site_E_Recov, T_TRI_RWM_Qty_On_Site_Recycle, T_TRI_RWM_Qty_Off_Site_Recycle, T_TRI_RWM_Qty_On_Site_Treat, T_TRI_RWM_Qty_Off_Site_Treat, T_TRI_RWM_Qty_Rel_Non_Prod.

Non-Radioactive Hazardous Waste:

– For all sites within state selected by the user, for the records where W_WGR_Cur_Year equals the most current year, sum all waste volumes based on the following categories of non-hazardous waste:

- Routine RCRA
- Routine TSCA
- Routine State
- Non-Routine RCRA
- Non-Routine TSCA
- Non-Routine State
- Routine Sanitary
- Non-Routine Sanitary

Materials in Inventory:

- For the Materials in Inventory information, the only information available is from 1996. This information should be listed regardless of the year selected by the user, but the user should be made aware of the time frame of the data.

- For the sites within the selected state, sum all M_Mat_Inv_Amt fields that have the same MIN Category (M_Mat_Cat_Name) print each "MIN Category" field and it's associated inventory amount. Print the units, M_Mat_UnitM_Name behind each total.

- For the total field, sum the volumes for each Material category

Buried TRU information (ON HOLD):

- The "Type of Placement" column contains all of the valid values from the "Placement" field of the Orig_Material table.

- The "No Action" column is a sum of the "Contaminated Soil-No Action" and "Emplaced Waste-No Action" fields from the Anticipated Response table. Grouping is by "Type of Placement"

- The "Access/Institutional Controls" column is a sum of the "Contaminated Soil-Access/Institutional Control" and "Emplaced Waste-Access/Institutional Controls" fields from the Anticipated Response table. Grouping is by "Type of Placement"

- The "In-Situ Containment" column is a sum of the "Contaminated Soil-In-Situ Containment" and "Emplaced Waste-In-Situ Containment" fields from the Anticipated Response table. Grouping is by "Type of Placement."

- The "In-Situ Treatment" column is a sum of the "Contaminated Soil-In-Situ Treatment" and "Emplaced Waste-In-Situ Treatment" fields from the Anticipated Response table. Grouping is by "Type of Placement."

- The "Collection and Treatment"column is a sum of the "Contaminated Soil-Collection and Treatment" and "Emplaced Waste-Collection and Treatment" fields from the Anticipated Response table. Grouping is by "Type of Placement."

- The "Collection and Storage" column is a sum of the "Contaminated Soil-Collection and Storage" and "Emplaced Waste-Collection and Storage" fields from the Anticipated Response table. Grouping is by "Type of Placement."

- The "Collection and Disposal" column is a sum of the "Contaminated Soil-Collection and Disposal" and "Emplaced Waste-Collection and Disposal" fields from the Anticipated Response table. Grouping is by "Type of Placement."

- The "Total" column is a sum across the row for each type of placement.

Record Selection:

The user should be able to select one state from a valid list of all states where DOE sites exist in the DOE complex. The SUM-10 will be presented in PDF format for that selected state.

Sorting/Grouping:

N/A

Report Sum-11: Comprehensive Year Profile Report

Description:

Shows summary data for a selected year across all data sets. The report provides a profile for a selected year beginning with the first year of actual data stored in the CID (1998).

Applicable Records:

Data associated with a selected data set year.

Waste streams that have a value in the Parent_WS_Code field of the WasteStreamHeader table will be excluded.

Applicable Tables:

T_F_Property, T_E_Waste_Stream_Header, T_E_WS_Activity_Header, T_E_WS_Activity_Annual, txWS_Activity, T_W_Waste_Gen_Rpt, T_S_Site, T_S_Ops_Field_Off.

Special Calculations/Formatting:

- Users should be able to select a particular reporting year of interest (similar to the pick list selection implemented for SUM-8), beginning with the year in which actual data exists - 1998. Data are presented in the report only for the year selected by the user.

- MIN data will not be included in the report, since it represents actual data from 1996.

- If no data exists yet for the year selected (example, TRI has not provided 1998 data as of yet) - then the words “No data available for the selected year” should print after the data set title.

- Ops Office is determined by reading the site assigned to a record, locating that site in the "Site" table and then reading the T_S_Ops_Field_Office_Code from table T_S_Ops_Field_Off. If the site is not assigned an Operations Office in the site table, then leave the record out of the report (except for Facilities, where sites with unassigned Operations Offices will be included in the “Other” column).

The report is divided into the following sections:

Contaminated facilities information:

- For the first sub-table, read T_F_Property to determine the site associated with each property record and the F_Prop_Contam_Name associated with each property record.

- Read T_S_Site to determine the operations office associated with the site (S_Site_Ops_Field_Office_Code, read T_S_Ops_Field_Off to get the Operations Office Name from S_OFO_Site_Field_Off_Desc).

- Count the number of sites that have the same Operations Office Name and the same F_Prop_Contam_Name and place in the appropriate place in the "Contaminated Facilities Information" matrix. If the F_Prop_Contam_Name field is blank, place these counts for each office in the row labeled "No Information Provided".

Radioactive Waste and Spent Nuclear Fuel Information:

- For all the Radioactive Waste rows, identify the radioactive waste records by selecting all waste streams where the T_E_Waste_Stream_Header attribute E_WSH_In_Situ_ Stream" = N, where attribute "E_WSH_waste_type_name" is NOT equal to "SNF," and where attribute E_WSH_Ex_Situ_Stream" = N. In addition, attribute "E_WSH_Unit_Name" is NOT = "# of tanks" or "number of items."

- All of the following radioactive waste information will be summed by Ops Office, and the totals for each Ops Office and Waste Type/Activity combination will be presented in the table as follows:

  - For each waste type, the "On Site Generation" row is a sum of all of the E_WSAA_source_FYXXXX by Operations Office, (where "XXXX" equals the year selected by the user) values in T_E_WS_Activity_Annual table for all waste streams where the WS_Activity_Category_Code (from tx_Src_WS_Activity) of the E_WSAH_source_WS_Activity_Code = "GEN."
  - For each waste type, the "On Site Treatment" row is a sum of all of the E_WSAA_SNFTRT_FYXXXX by Operations Office (where "XXXX" equals the year selected by the user) values in T_E_WS_Activity_Annual table for all waste streams where the WS_Activity_Category_Code (from tx_Disp_WS_Activity) of the E_WSAH_disp_WS_Activity_Code is "TRT".
  - For each waste type, the "Quantity Disposed" row is a sum of all of the E_WSAA_disp_FYXXXX by Operations Office, (where "XXXX" equals the year selected by the user) values in T_E_WS_Activity_Annual table for all waste streams where the WS_Activity_Category_Code (from tx_Disp_WS_Activity) of the E_WSAH_disp_WS_Activity_Code is "DISP".

- For each waste type, the “Other Processing Quantity” row is a sum of all of the E_WSAA_disp_FYXXXX , by Operations Office, (where “XXXX” equals the year selected by the user) values in T_E_WS_Activity_Annual table for all waste streams where the WS_Activity_Category_Code (from tx_Disp_WS_Activity) of the E_WSAH_disp_WS_Activity_Code is "NPDES" or "RRU" or "OTHPR" or "RECYC".

The HLW-Vitrified Row, all computations are the same except the logic for the “Quantity Generated” row, which be derived as follows:

- For each waste type, the “Quantity Generated” row is a sum of all of the E_WSAA_source_FYXXXX, by Operations Office, (where “XXXX” equals the year selected by the user) values in T_E_WS_Activity_Annual table for all waste streams where the WS_Activity_Category_Code (from tx_Src_WS_Activity) of the E_WSAH_source_WS_Activity_Code = "GEN" or “SEC”.

Spent Nuclear Fuel Row

- For all the Spent Nuclear Fuel Row, identify the SNF records by selecting all streams where the T_E_Waste_Stream_Header attribute "E_WSH_waste_type_name" = "SNF". In addition, attribute "E_WSH_Unit_Name" = MTHM and there E_WSH_Parent_WS_Code is null.

- The "Quantity Generated" row is a summation of all E_WSAA_source_FYXXXX, by Operations Office, where XXXX is the selected year (but the year must be a CURRENT YEAR actual, no projected years can be selected) SNF stream volumes in T_E_WS_Activity_Annual where the E_WSAH_source_WS_activity_code in T_E_WS_Activity_Header = "GEN".

- The "On Site Treatment Quantity" column is a summation of all E_WSAA_SNFTRT_FYXXXX, by Operations Office, where XXXX is the selected year (but the year must be a CURRENT YEAR actual, no projected years can be selected) SNF stream volumes in T_E_WS_Activity_Annual where E_WSAH_Disp_WS_activity_code in T_E_WS_Activity_Header = "TRTSF".

- The "Ship to Other DOE Site for Management or Storage" column is a summation of all E_WSAA_disp_FYXXXX, by Operations Office, where XXXX is the selected year (but the year must be a CURRENT year actual, no projected years can be selected) SNF stream volumes in T_E_WS_Activity_Annual where the E_WSAH_disp_WS_activity_code in T_E_WS_Activity_Header is NOT equal to “DISP" and where the E_WSAH_disp_geo_site_code is different from the E_WSH_Geo_Site_Code in Waste_Stream_Header.

- The "Ship for Final Disposition" column is a summation of streams, by site, of all E_WSAA_disp_FYXXXX by Operations Office , where XXXX is the selected year (but the

year must be a CURRENT year actual, no projected years can be selected) SNF stream volumes in T_E_WS_Activity_Annual where the E_WSAH_disp_WS_activity_code in T_E_WS_Activity_Header = "DISP" and where the E_WSAH_disp_geo_site_code is different from the E_WSH_Geo_Site_Code in Waste_Stream_Header.

Ex-Situ Contaminated Media Information:

– For all the ex-situ contaminated media rows, identify the radioactive waste records by selecting all waste streams where the T_E_Waste_Stream_Header attribute E_WSH_In_Situ_ Stream" = N, where attribute "E_WSH_waste_type_name" is NOT equal to "SNF," and where attribute E_WSH_Ex_Situ_Stream" = Y. In addition, attribute "E_WSH_Unit_Name" is NOT = "# of tanks" or "number of items."

– All of the following radioactive waste information will be summed by Ops Office, and the totals for each Ops Office and Waste Type/Activity combination will be presented in the table as follows:

- For each waste type, the “Quantity Generated” row is a sum of all of the E_WSAA_source_FYXXXX by Operations Office, (where “XXXX” equals the year selected by the user) values in T_E_WS_Activity_Annual table for all waste streams where the WS_Activity_Category_Code (from tx_Src_WS_Activity) of the E_WSAH_source_WS_Activity_Code = "ERGEN."
- For each waste type, the “Quantity Treated” row is a sum of all of the E_WSAA_disp_FYXXXX by Operations Office (where “XXXX” equals the year selected by the user) values in T_E_WS_Activity_Annual table for all waste streams where the WS_Activity_Category_Code (from tx_Disp_WS_Activity) of the E_WSAH_disp_WS_Activity_Code is "TRT".
- For each waste type, the “Quantity Disposed” row is a sum of all of the E_WSAA_disp_FYXXXX by Operations Office (where “XXXX” equals the year selected by the user) values in T_E_WS_Activity_Annual table for all waste streams where the WS_Activity_Category_Code (from tx_Disp_WS_Activity) of the E_WSAH_disp_WS_Activity_Code is "DISP".
- For each waste type, the “Other Processing Quantity” row is a sum of all of the E_WSAA_disp_FYXXXX by Operations Office, (where “XXXX” equals the year selected by the user) values in T_E_WS_Activity_Annual table for all waste streams where the WS_Activity_Category_Code (from tx_Disp_WS_Activity) of the E_WSAH_disp_WS_Activity_Code is "NPDES" or "RRU" or "OTHPR" or "RECY".

- The total column is a sum across the row for each waste type/management activity.

Toxic Release Inventory Information:

- For the reporting year selected by the user, sum the quantities for all sites in each operations office in each of these fields from the T_T_TRI as follows:

  On Site Releases: Total of the following for the current year: T_TRI_CROS_Fugitive_Air_Emis, T_TRI_CROS_Stack_Air_Emis, T_TRI_CROS_Discharge_Rcv_Strm, T_TRI_CROS_On-Site_UGrnd_Inj, and T_TRI_CROS_Land_Release.

  Off Site Transfers: Total of the following for the current year: T_TRI_OSX_Tot_Xfer_Other, T_TRI_OSX_Tot_Xfer_POTWs

  Source Reduction, Recycling and Waste Management: Total of the the following for the current year: T_TRI_RWM_Qty_Rel_EPCRA, T_TRI_RWM_Qty_On_Site_E_Recov, T_TRI_RWM_Qty_Off_Site_E_Recov, T_TRI_RWM_Qty_On_Site_Recycle, T_TRI_RWM_Qty_Off_Site_Recycle, T_TRI_RWM_Qty_On_Site_Treat, T_TRI_RWM_Qty_Off_Site_Treat, T_TRI_RWM_Qty_Rel_Non_Prod.

Non-Radioactive Hazardous Waste:

- For the records where the W_WGR_Cur_Year in T_W_Waste_Gen_Rpt equals the year selected by the user, sum all waste volumes based on the following categories of Non-hazardous waste:

  - Routine RCRA
  - Routine TSCA
  - Routine State
  - Routine Sanitary
  - Non-Routine RCRA
  - Non-Routine TSCA
  - Non-Routine State
  - Non-Routine Sanitary

- Information will be grouped (in columns) by Ops Office.

Buried TRU Information (ON HOLD):

- The "Type of Placement" column contains all of the valid values from the "Placement" field of the Orig_Material table.

- The "No Action" column is a sum of the "Contaminated Soil-No Action" and "Emplaced Waste-No Action" fields from the Anticipated Response table. Grouping is by "Type of Placement"

- The "Access/Institutional Controls" column is a sum of the "Contaminated Soil-Access/Institutional Control" and "Emplaced Waste-Access/Institutional Controls" fields from the Anticipated Response table. Grouping is by "Type of Placement"

- The "In-Situ Containment" column is a sum of the "Contaminated Soil-In-Situ Containment" and "Emplaced Waste-In-Situ Containment" fields from the Anticipated Response table. Grouping is by "Type of Placement."

- The "In-Situ Treatment" column is a sum of the "Contaminated Soil-In-Situ Treatment" and "Emplaced Waste-In-Situ Treatment" fields from the Anticipated Response table. Grouping is by "Type of Placement."

- The "Collection and Treatment"column is a sum of the "Contaminated Soil-Collection and Treatment" and "Emplaced Waste-Collection and Treatment" fields from the Anticipated Response table. Grouping is by "Type of Placement."

- The "Collection and Storage" column is a sum of the "Contaminated Soil-Collection and Storage" and "Emplaced Waste-Collection and Storage" fields from the Anticipated Response table. Grouping is by "Type of Placement."

- The "Collection and Disposal" column is a sum of the "Contaminated Soil-Collection and Disposal" and "Emplaced Waste-Collection and Disposal" fields from the Anticipated Response table. Grouping is by "Type of Placement."

- The "Total" column is a sum across the row for each type of placement.

Record Selection:

The user should be able to select one year from a valid list of all years where actual data exists in the CID. The SUM-11 will be presented in PDF format for that selected year.

Sorting/Grouping:

N/A

Report SUM-12: DOE Waste and SNF Management Activity Quantities in the Current Year by Site

Description:

This report summarizes, by site, the management activities (i.e. treatment, disposal, etc) for the current year (i.e the most recent year's actual data in the Central Internet Database) for each waste type across the DOE complex. Quantities are presented for each management activity and waste type. Spent nuclear fuel quantities are presented for the unique spent nuclear fuel management activities.

Applicable Records:

All waste stream records in T_E_WS_Activity_Annual for disp_FYXXXX (where XXXX is equal to the most current year where actual quantities exist). For this set of waste streams, exclude waste stream records that have a value in the Parent_WS_Code field of T_E_Waste_Stream_Header, and exclude records where the unit name associated with the amount(s) is equal to "# of tanks"(NT) or "number of items" (NI). Include only SNF streams where E_WSH_Unit_Name = “MTHM”.

Applicable Tables:

T_E_Waste_Stream_Header, T_E_WS_Activity_Header, T_E_WS_Activity_Annual, tx_Src_WS_Activity,tx_Disp_WS_Activity

Special Calculations/Formatting:

- The most current year where actual values are available should be used and designated at the beginning of the report.

For Non-SNF streams:

- Select all waste stream records where T_E_Waste_Stream_Header table attribute E_WSH_Waste_Type_Code is not equal to “SNF”. Produce a separate table for each waste type in the current year.

- Quantity data should be presented by rounding numbers to 3 significant digits to the right of the decimal. Add a footnote that explains if values are lower than .001 (rounded), they will appear as zero on the report. Totals should add the values first and then round the result to 3 significant digits to the right of the decimal.

- The "Starting Inventory" column displays in E_WSAA_inv_FYXXXX (where XXXX equals the current year minus 1).

- The "Total" row is a sum of each site volume for each activity. Provide totals for all columns.

- The "New" column is a summation, by site, of all E_WSAA_source_FYXXXX (where XXXX equals the current year) waste stream volumes in T_E_WS_Activity_Annual where the WS_activity_category_code (in tx_Src_WS_Activity) of the E_WSAH_source_WS_activity_code in T_E_WS_Activity_Header = "GEN" or “ERGEN”.

- The "Process Outputs" column is a summation, by site, of all E_WSAA_source_FYXXX (where XXXX equals the current year) waste stream volumes in T_E_WS_Activity_Annual where the WS_activity_category_code (in tx_Src_WS_Activity) of the E_WSAH_ Source_WS_activity_code in T_E_WS_Activity_Header = "SEC".

- The "Receipts" column is a summation, by site, of all E_WSAA_source_FYXXXX (where XXXX equals the current year) waste stream volumes the where the WS_activity_category_code (in tx_Src_WS_Activity) of the E_WSAH_Source_WS_activity_code in T_E_WS_Activity_Header = "RCPT".

- The "Treatment Quantity-On-Site" column is a summation, by site, of all E_WSAA_disp_FYXXXX (where XXXX equals the current year) waste stream volumes in T_E_WS_Activity_Annual where the WS_activity_category_code (in tx_Disp_WS_Activity) of the E_WSAH_Disp_WS_activity_code in T_E_WS_Activity_Header = "TRT" and the E_WSAH_Disp_geo_site_code in the WS_Activity Header table is the same as the E_WSH_geo_site_code in the T_E_WasteStreamHeader table.

- The "Treatment Quantity-Off-Site" column is a summation, by site, of all E_WSAA_disp_FYXXXX (where XXXX equals the current year) waste stream volumes in T_E_WS_Activity_Annual where the WS_activity_category_code (in tx_Disp_WS_Activity) of the E_WSAH_Disp_WS_activity_code in WS_Activity_Header = "TRT" and the E_WSAH_Disp_geo_site_code in the T_E_WS_Activity Header table is not the same as the E_WSH_geo_site_code in the T_E_WasteStreamHeader table AND the E_WSAH_Disp_geo_site_code does not equal "TBD".

- The "Treatment Quantity-TBD" column is a summation, by site, of all E_WSAA_disp_FYXXXX (where XXXX equals the current year) waste stream volumes in T_E_WS_Activity_Annual that equal where the WS_activity_category_code (in tx_Disp_WS_Activity) of the E_WSAH_Disp_WS_activity_code in WS_Activity_Header = "TRT" and the E_WSAH_Disp_geo_site_code in the T_E_WS_Activity Header table = "TBD".

- The "Disposal Quantity-On-Site" column is a summation, by site, of all E_WSAA_disp_FYXXXX (where XXXX equals the current year) waste stream volumes in T_E_WS_Activity_Annual where the WS_activity_category_code (in tx_Disp_WS_Activity) of the E_WSAH_Disp_WS_activity_code in

T_E_WS_Activity_Header = "DISP" and the E_WSAH_Disp_geo_site_code in the T_E_WS_Activity Header table is the same as the E_WSH_geo_site_code in the T_E_WasteStreamHeader table.

- The "Disposal Quantity-Off-Site" column is a summation, by site, of all E_WSAA_disp_FYXXXX (where XXXX equals the current year) waste stream volumes in T_E_WS_Activity_Annual where the WS_activity_category_code (in tx_Disp_WS_Activity) of the E_WSAH_Disp_WS_activity_code in T_E_WS_Activity_Header = "DISP" and the E_WSAH_Disp_geo_site_code in the T_E_WS_Activity Header table is NOT the same as the E_WSH_geo_site_code in the T_E_WasteStreamHeader table AND the E_WSAH_Disp_geo_site_code does not equal "TBD".

- The "Disposal Quantity-TBD" column is a summation, by site, of all E_WSAA_disp_FYXXXX (where XXXX equals the current year) waste stream volumes in T_E_WS_Activity_Annual where the WS_activity_category_code (in tx_Disp_WS_Activity) of the E_WSAH_Disp_WS_activity_code in T_E_WS_Activity_Header ="DISP" and the E_WSAH_Disp_geo_site_code in the WS_Activity Header table = "TBD".

- The "Other Dispositions" column is a summation, by site, of all E_WSAA_disp_FYXXXX (where XXXX equals the current year) waste stream volumes in T_E_WS_Activity_Annual where the WS_activity_category_code (in tx_Disp_WS_Activity) of the E_WSAH_Disp_WS_activity_code in T_E_WS_Activity_Header = "OTHPR" or "NPDES", or "RRU" or "RECY"

- The "TBD Disposition" column is a summation, by site, of all E_WSAA_disp_FYXXXX (where XXXX equals the current year) waste stream volumes in T_E_WS_Activity_Annual where the WS_activity_category_code (in tx_Disp_WS_Activity) of the E_WSAH_Disp_WS_activity_code in T_E_WS_Activity_Header = "TBD".

- The "Ending Inventory" column is a summation of all inv_FYXXXX (where XXXX equals the current) waste stream volumes for each site.

For SNF streams:

NOTE: SNF reports for management activities cannot use the activity category code for some of the disposition and treatment activities. In some cases, you must use the activity code, in others you have to use the activity category code. Please follow specification closely to see when category code is used and when activity code is used.

- All volumes for this report are reported in Metric Tons of Heavy Metal (MTHM).

- Quantity data should be presented by rounding numbers to 4 significant digits to the right of the decimal. Add a footnote that explains if values are lower than .0001 (rounded), they will appear as zero on the report. Totals should add the values first and then round the result to 4 significant digits to the right of the decimal.

- The "Starting Inventory" column is a summation of streams, by site, of all E_WSAA_inv_FYXXXX (where XXXX equals the current year minus 1) SNF stream volumes in T_E_WS_Activity Annual.

- The "On Site Generation" column is a summation of streams, by site, of all E_WSAA_source_FYXXXX (where XXXX equals the current year) SNF stream volumes in T_E_WS_Activity_Annual where E_WSAH_source_WS_activity_code in T_E_WS_Activity_Header = "GEN".

- The "Off-Site Receipts" column is a summation of streams, by site, of all E_WSAA_source_FYXXXX (where XXXX equals the current year) SNF stream volumes in T_E_WS_Activity_Annual where E_WSAH_source_WS_activity_code in T_E_WS_Activity_Header = "RCPT", and where E_WSAH_source_geo_site_code is different from E_WSH_Geo_Site_Code in T_E_Waste_Stream_Header.

- The first “Total” Column is the summation, by site, of the starting inventory, on-site generation, and off-site receipt quantities.

- The "On Site Treatments" column is a summation of streams, by site, of all E_WSAA_SNFTRT_FYXXXX (where XXXX equals the current year) stream volumes in T_E_WS_Activity_Annual where E_WSAH_Disp_WS_activity_code in T_E_WS_Activity_Header = "TRTSF".

- The "Ship to Other DOE Site for Management/Storage" column is a summation of streams, by site, of all E_WSAA_disp_FYXXXX (where XXXX equals the current year) SNF stream volumes in T_E_WS_Activity_Annual where E_WSAH_disp_WS_activity_code in T_E_WS_Activity_Header is NOT equal to "DISP" and where the E_WSAH_disp_geo_site_code is different from the E_WSH_Geo_Site_Code in Waste_Stream_Header.

- The "Ship for Final Disposal" column is a summation of streams, by site, of all E_WSAA_disp_FYXXXX (where XXXX equals the current year) SNF stream volumes in T_E_WS_Activity_Annual where E_WSAH_disp_WS_activity_code in T_E_WS_Activity_Header = "DISP" and where the E_WSAH_disp_geo_site_code is different from the E_WSH_Geo_Site_Code in Waste_Stream_Header.

- The second "Total" column is the summation, by site, of the “On Site Treatment”, “Ship to Other DOE Site for Management/Storage”, and “Ship for Final Disposition” columns

Record Selection:

N/A

Sort and Group:

Sort Order:	**Group Order:**
Management Activity	Management Activity
Waste Type	Waste Type
Site	Site

5.0 Outstanding Issues

As of the publication of this document, some implementation issues impacting future CID functionality are outstanding. Table 1 provides a list of these items, their resolution path, and their impact on continuing CID report development.

Table 1 Outstanding Issues for Report Specification Development

#	Issue Description	Impact	Proposed Resolution
1	The Buried TRU database is not yet available for inclusion in the CID, and the project team does not have information on its current content and structure. In addition, DOE is currently analyzing where the data from the Buried TRU database can be included in the EM corporate database by converting the information into waste streams.	The specifications for CID Buried TRU reports were designed based on the original database structure. If the structure and content has changed significantly, or if the data is integrated with EM Corporate data, the CID database and original Buried TRU report specifications will need to be redone.	The DOE Project Manager and the CID Project team are consulting with the Buried TRU owners to obtain the current database structure. The DOE Project Manager is working with the owners to determine if converting the Buried TRU data to waste streams in the EM Corporate database is feasible.
2	The 1999 data collection effort for the EM Corporate database is nearing completion. The team is aware that there are some changes to the EM Corporate database structure for this collection year that will need to be accommodated in the CID.	Data migration programs and current report code will need to be updated to account for new database structure that impacts CID reports.	The project team is beginning to analyze the 1999 data as it becomes available, and will determine the full impact of the changes by the end of May 2000.
3	The years that each data set represents are slightly different for each data source. This introduces complexity into how to identify specific sets of data in the CID (i.e. whether it will be a single year for all data sources, or whether it will be year the data was received and updated to the CID).	The data set id selection for the CID reports is not yet implemented, although the fields have been established in the database. If adjustments are required, the team may need to redefine and restructure the current data set fields to support the final data set tracking protocol.	The driver for the decision will largely come from how the EM Corporate database tracks and manages different datasets, since most of the data comes from this source. Through analysis of the 1999 EM Corporate update, the project team along with the DOE Project Manager will determine how best to distinguish sets of data in the CID.

#	Issue Description	Impact	Proposed Resolution
4	Several ready to read reports aggregate radioactivity data (in curies) into summary totals. It is unclear at this time how this aggregation will be performed. Two options are: rollup data from the total activity in curies data element from EM Corporate database or derive summary curie data from algorithms that use isotope concentrations provided by the field. The approach may differ fro waste and spent nuclear fuel.	If we aggregate data from the total activity in curies field, adjustments to the report specifications will be minimal. If we need to go through algorithms, this will require some database changes and adjustments to existing report specifications and programs.	The DOE Project Manager is discussing these options with subject matter experts and will determine a course of action before the 1999 EM Corporate data is updated to the CID.
5	There is no data source currently identified for NWPA or FUSRAP sites.	No reports can be currently designed for FUSRAP or NWPA sites until a data source is identified and incorporated into the CID data model.	The DOE Project Manager is currently investigating potential data sources.

APPENDIX A:
CID Physical Database Model

Buried TRU

T_B_Response
B_Resp_Site_Num: NUMBER(12)
B_Resp_DS_ID: NUMBER(3)
B_Resp_EW_No: NUMBER(14,2)
B_Resp_EW_Access: NUMBER(14,2)
B_Resp_EW_ISC: NUMBER(14,2)
B_Resp_EW_C_Type: VARCHAR2(50)
B_Resp_EW_IST: NUMBER(14,2)
B_Resp_EW_T_Type: VARCHAR2(50)
B_Resp_EWT_No: NUMBER(14,2)
B_Resp_EWT_Access: NUMBER(14,2)
B_Resp_EWT_ISC: NUMBER(14,2)
B_Resp_EWT_C_Type: VARCHAR2(50)
B_Resp_EWT_IST: NUMBER(14,2)
B_Resp_EWT_T_Type: VARCHAR2(50)
B_Resp_EWL_No: NUMBER(14,2)
B_Resp_EWL_Access: NUMBER(14,2)
B_Resp_EWL_ISC: NUMBER(14,2)
B_Resp_EWL_C_Type: VARCHAR2(50)
B_Resp_EWL_IST: NUMBER(14,2)
B_Resp_EWL_T_Type: VARCHAR2(50)
B_Resp_CS_No: NUMBER(14,2)
B_Resp_CS_Access: NUMBER(14,2)
B_Resp_CS_ISC: NUMBER(14,2)
B_Resp_CS_C_Type: VARCHAR2(50)
B_Resp_CS_IST: NUMBER(14,2)
B_Resp_CS_T_Type: VARCHAR2(50)
B_Resp_CST_No: NUMBER(14,2)
B_Resp_CST_Access: NUMBER(14,2)
B_Resp_CST_ISC: NUMBER(14,2)
B_Resp_CST_C_Type: VARCHAR2(50)
B_Resp_CST_IST: NUMBER(14,2)
B_Resp_CST_T_Type: VARCHAR2(50)
B_Resp_CSL_No: NUMBER(14,2)
B_Resp_CSL_Access: NUMBER(14,2)
B_Resp_CSL_ISC: NUMBER(14,2)
B_Resp_CSL_C_Type: VARCHAR2(50)
B_Resp_CSL_IST: NUMBER(14,2)
B_Resp_CSL_T_Type: VARCHAR2(50)
B_Resp_EW_CT: NUMBER(14,2)
B_Resp_REW_T_Type: VARCHAR2(50)
B_Resp_EW_CS: NUMBER(14,2)
B_Resp_EW_S_Type: VARCHAR2(50)
B_Resp_EW_CD: NUMBER(14,2)
B_Resp_EW_Dispose: VARCHAR2(50)
B_Resp_EWT_CT: NUMBER(14,2)
B_Resp_REWT_T_Type: VARCHAR2(50)
B_Resp_EWT_CS: NUMBER(14,2)
B_Resp_EWT_S_Type: VARCHAR2(50)
B_Resp_EWT_CD: NUMBER(14,2)
B_Resp_EWT_Dispose: VARCHAR2(50)
B_Resp_EWL_CT: NUMBER(14,2)
B_Resp_REWL_T_Type: VARCHAR2(50)
B_Resp_EWL_CS: NUMBER(14,2)
B_Resp_EWL_S_Type: VARCHAR2(50)
B_Resp_EWL_CD: NUMBER(14,2)
B_Resp_EWL_Dispose: VARCHAR2(50)
B_Resp_CS_CT: NUMBER(14,2)
B_Resp_RCS_T_Type: VARCHAR2(50)
B_Resp_CS_CS: NUMBER(14,2)
B_Resp_CS_S_Type: VARCHAR2(50)
B_Resp_CS_CD: NUMBER(14,2)
B_Resp_CS_Dispose: VARCHAR2(50)
B_Resp_CST_CT: NUMBER(14,2)
B_Resp_RCST_T_Type: VARCHAR2(50)
B_Resp_CST_CS: NUMBER(14,2)
B_Resp_CST_S_Type: VARCHAR2(50)
B_Resp_CST_CD: NUMBER(14,2)
B_Resp_CST_Dispose: VARCHAR2(50)
B_Resp_CSL_CT: NUMBER(14,2)
B_Resp_RCSL_T_Type: VARCHAR2(50)
B_Resp_CSL_CS: NUMBER(14,2)
B_Resp_CSL_S_Type: VARCHAR2(50)
B_Resp_CSL_CD: NUMBER(14,2)
B_Resp_CSL_Dispose: VARCHAR2(50)

T_B_Addl_Supp_Info
B_ASup_Site_Num: NUMBER(12)
B_ASup_DS_ID: NUMBER(3)
B_ASup_Response_Plans: CLOB
B_ASup_Status: CLOB
B_ASup_Contaminants: CLOB

T_B_Orig_Material
B_OMat_DS_ID: NUMBER(3)
B_OMat_Site_Num: NUMBER(12)
B_OMat_Site_Name: VARCHAR2(150)
B_OMat_Man_Prog_Code: CHAR(2)
B_OMat_Origin: CLOB
B_OMat_Placement: VARCHAR2(7)
B_OMat_Placement_Remarks: CLOB
B_OMat_Actual_Waste_Emplaced: NUMBER(14,2)
B_OMat_Containers_Emplaced: NUMBER(14,2)
B_OMat_Volume_Remarks: CLOB
B_OMat_Solid_Types: VARCHAR2(15)
B_OMat_Material_Remarks: CLOB
B_OMat_Percent_Exceeding: NUMBER(5,2)
B_OMat_Percent_Between: NUMBER(5,2)
B_OMat_Total_TRU_Rads: VARCHAR2(50)
B_OMat_Units: VARCHAR2(2)
B_OMat_Percent_Key_Radio: VARCHAR2(50)
B_OMat_Am_241: VARCHAR2(50)
B_OMat_Pu_238: VARCHAR2(50)
B_OMat_Pu_239: VARCHAR2(50)
B_OMat_Pu_240: VARCHAR2(50)
B_OMat_Pu_241: VARCHAR2(50)
B_OMat_Pu_242: VARCHAR2(50)
B_OMat_U_233: VARCHAR2(50)
B_OMat_Cm_244: VARCHAR2(50)
B_OMat_Ra_266: VARCHAR2(50)
B_OMat_Cf_252: VARCHAR2(50)
B_OMat_Est_Values: VARCHAR2(50)
B_OMat_Decayed_Date: NUMBER(4)
B_OMat_Basis: CLOB
B_OMat_Confidence: VARCHAR2(6)
B_OMat_Emplaced_Volume: NUMBER(14,2)
B_OMat_Vol_Remarks: CLOB
B_OMat_Per_Exceed: NUMBER(5,2)
B_OMat_Per_Between: NUMBER(5,2)
B_OMat_Soil_Basis: CLOB
B_OMat_Soil_Confidence: VARCHAR2(6)
B_OMat_HE_Solids: NUMBER(14,2)
B_OMat_HO_Solids: NUMBER(14,2)
B_OMat_Liquid: NUMBER(14,2)
B_OMat_Other: NUMBER(14,2)

T_B_Supp_Vol
B_SVol_Site_Num: NUMBER(12)
B_SVol_DS_ID: NUMBER(3)
B_SVol_EW_Total: NUMBER(14,2)
B_SVol_EW_TRU: NUMBER(14,2)
B_SVol_EW_MTRU: NUMBER(14,2)
B_SVol_EW_LLW: NUMBER(14,2)
B_SVol_EW_MLLW: NUMBER(14,2)
B_SVol_L_Total: NUMBER(14,2)
B_SVol_L_TRU: NUMBER(14,2)
B_SVol_L_MTRU: NUMBER(14,2)
B_SVol_L_LLW: NUMBER(14,2)
B_SVol_L_MLLW: NUMBER(14,2)
B_SVol_HO_Total: NUMBER(14,2)
B_SVol_HO_TRU: NUMBER(14,2)
B_SVol_HO_MTRU: NUMBER(14,2)
B_SVol_HO_LLW: NUMBER(14,2)
B_SVol_HO_MLLW: NUMBER(14,2)
B_SVol_HE_Total: NUMBER(14,2)
B_SVol_HE_TRU: NUMBER(14,2)
B_SVol_HE_MTRU: NUMBER(14,2)
B_SVol_HE_LLW: NUMBER(14,2)
B_SVol_HE_MLLW: NUMBER(14,2)
B_SVol_CS_Total: NUMBER(14,2)
B_SVol_CS_TRU: NUMBER(14,2)
B_SVol_CS_MTRU: NUMBER(14,2)
B_SVol_CS_LLW: NUMBER(14,2)
B_SVol_CS_MLLW: NUMBER(14,2)
B_SVol_MIN_Total: NUMBER(14,2)
B_SVol_MIN_TRU: NUMBER(14,2)
B_SVol_MIN_MTRU: NUMBER(14,2)
B_SVol_MIN_LLW: NUMBER(14,2)
B_SVol_MIN_MLLW: NUMBER(14,2)
B_SVol_MAX_Total: NUMBER(14,2)
B_SVol_MAX_TRU: NUMBER(14,2)
B_SVol_MAX_MTRU: NUMBER(14,2)
B_SVol_MAX_LLW: NUMBER(14,2)
B_SVol_MAX_MLLW: NUMBER(14,2)
B_SVol_Volumes: VARCHAR2(50)
B_SVol_Other_LLW: NUMBER(14,2)
B_SVol_Other_MLLW: NUMBER(14,2)
B_SVol_Other_MTRU: NUMBER(14,2)
B_SVol_Other_Total: NUMBER(14,2)
B_SVol_Other_TRU: NUMBER(14,2)

TRI

T_T_TRI
T_TRI_DS_ID: NUMBER(3)
T_TRI_Fac_Name: VARCHAR2(50)
T_TRI_Chem_Name: VARCHAR2(50)
T_TRI_Year: NUMBER(4)
T_TRI_Site_Num: NUMBER(12)
T_TRI_OSX_Tot_Xfer_Other_OLOCT: NUMBER(12)
T_TRI_OSX_Tot_Xfer_POTWs_POTWT: NUMBER(12)
T_TRI_CROS_Fugitive_Air_Emis: NUMBER(12)
T_TRI_CROS_Stack_Air_Emis: NUMBER(12)
T_TRI_CROS_Discharge_Rcv_Strm: NUMBER(12)
T_TRI_CROS_On_Site_UGrnd_Inj: NUMBER(12)
T_TRI_CROS_Land_Release: NUMBER(12)
T_TRI_RWM_Qty_Rel_EPCRA: NUMBER(12)
T_TRI_RWM_Qty_On_Site_E_Recov: NUMBER(12)
T_TRI_RWM_Qty_Off_Site_E_Recov: NUMBER(12)
T_TRI_RWM_Qty_On_Site_Recycle: NUMBER(12)
T_TRI_RWM_Qty_Off_Site_Recycle: NUMBER(12)
T_TRI_RWM_Qty_On_Site_Treat: NUMBER(12)
T_TRI_RWM_Qty_Off_Site_Treat: NUMBER(12)
T_TRI_RWM_Qty_Rel_Non_Prod: NUMBER(12)

Waste Gen Report

T_W_Waste_Gen_Rpt
W_WGR_DS_ID: NUMBER(3)
W_WGR_Site_Num: NUMBER(12)
W_WGR_Cur_Year: NUMBER(4)
W_WGR_NonRoutine_RCRA: FLOAT
W_WGR_NonRoutine_State: FLOAT
W_WGR_NonRoutine_TSCA: FLOAT
W_WGR_Routine_RCRA: FLOAT
W_WGR_Routine_State: FLOAT
W_WGR_Routine_TSCA: FLOAT
W_WGR_RC_NonRoutine_Sanitary: FLOAT
W_WGR_RC_Routine_Sanitary: FLOAT

T_S_Site
S_Site_Num: NUMBER(12)
S_Site_Geo_Site_Code: CHAR(4)
S_Site_Geo_Site_Shortname: VARCHAR2(50)
S_Site_State_Code: CHAR(2)
S_Site_Ops_Field_Office_Code: CHAR(2)
S_Site_Name: VARCHAR2(50)
S_Site_Mailing_Address: VARCHAR2(30)
S_Site_City: VARCHAR2(23)
S_Site_Zip_Code: VARCHAR2(10)
S_Site_County_Country: VARCHAR2(25)
S_Site_Excd_Desc: VARCHAR2(15)
S_Site_DOE_Site: CHAR(1)
S_Site_EM_Site: CHAR(1)
S_Site_Geo_Site_Type: CHAR(1)
S_Site_Geo_Site_Category: VARCHAR2(10)

T_S_Ops_Field_Off
S_OFO_Ops_Field_Off_Code: CHAR(2)
S_OFO_Site_Field_Off_Desc: VARCHAR2(50)

T_S_State
S_State_Code: CHAR(2)
S_State_Name: VARCHAR2(50)

T_S_Data_Set
S_DS_ID: NUMBER(3)
S_DS_Rpt_Period_ID: NUMBER(2)
S_DS_Code: CHAR(3)
S_DS_Desc: CLOB
S_DS_Date: DATE
S_DS_Latest: CHAR(1)

T_S_Man_Program
S_MPrg_Man_Prog_Code: CHAR(2)
S_MPrg_Man_Prog_Desc: VARCHAR2(50)
S_MPrg_Owner_Name: VARCHAR2(50)

T_E_WS_Variance
E_WSV_Site_Num: NUMBER(12)
E_WSV_DS_ID: NUMBER(3)
E_WSV_Variance_Narr_Prior_Year: CLOB
E_WSV_Variance_Narr_Life_Cycle: CLOB

MIN

T_M_Material
M_Mat_ID: NUMBER(12)
M_Mat_DS_ID: NUMBER(3)
M_Mat_Site_Num: NUMBER(12)
M_Mat_Cat_Name: VARCHAR2(26)
M_Mat_Sub_Cat_Name: VARCHAR2(30)
M_Mat_Name: VARCHAR2(50)
M_Mat_Form: VARCHAR2(50)
M_Mat_Inv_Amt: NUMBER(12,2)
M_Mat_Inv_Amt_Class: CHAR(1)
M_Mat_Unit_Name: VARCHAR2(15)
M_Mat_Facility_Name: VARCHAR2(50)
M_Mat_Rad_Contam: VARCHAR2(2)
M_Mat_Prog_Recom_Disp: VARCHAR2(25)

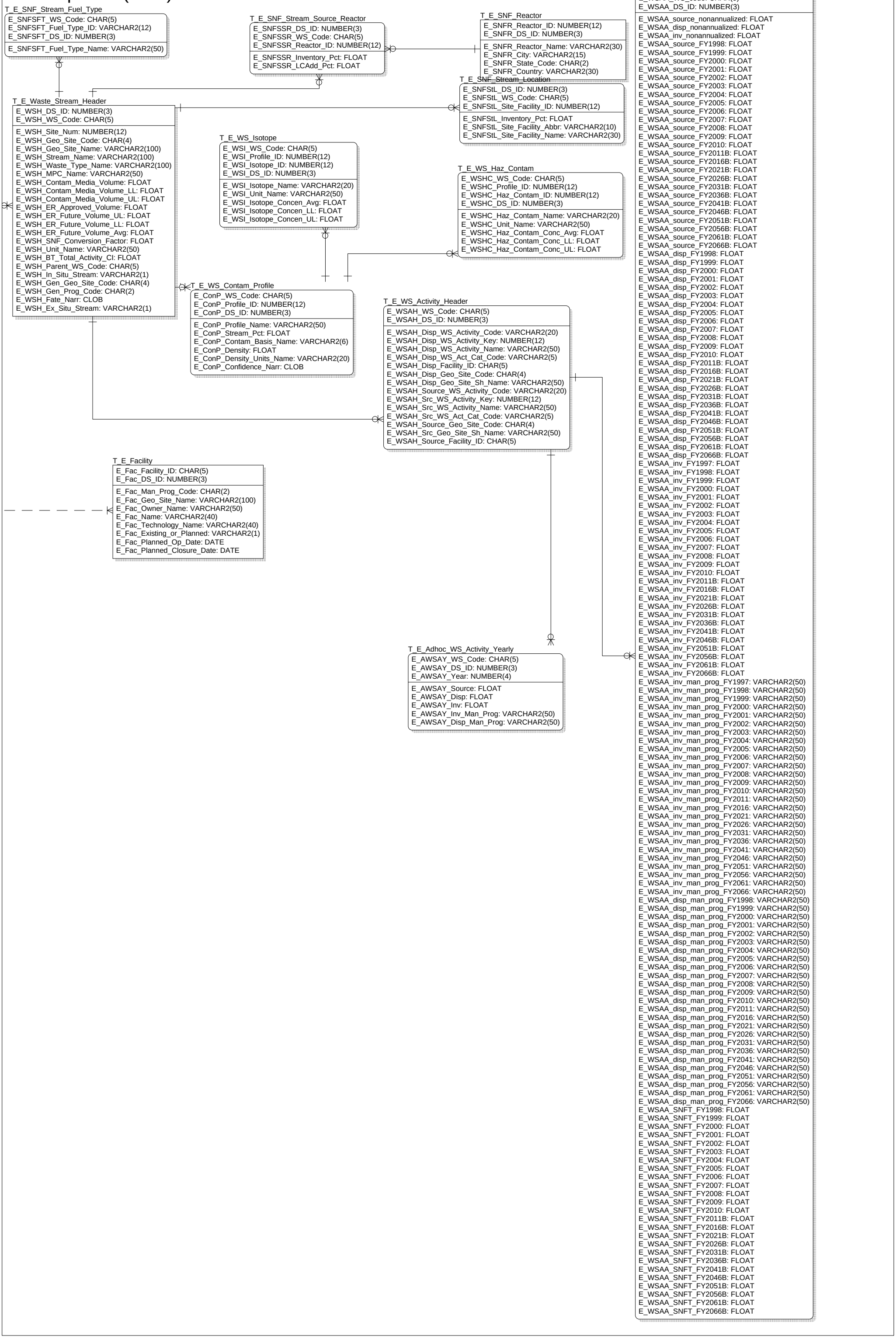
FIMS

T_F_Stored_NM
F_SNM_DS_ID: NUMBER(3)
F_SNM_Haz_NMW_ID: VARCHAR2(20)
F_SNM_Site_Num: NUMBER(12)
F_SNM_NMW_Facs: NUMBER(12)
F_SNM_Haz_Name: VARCHAR2(50)

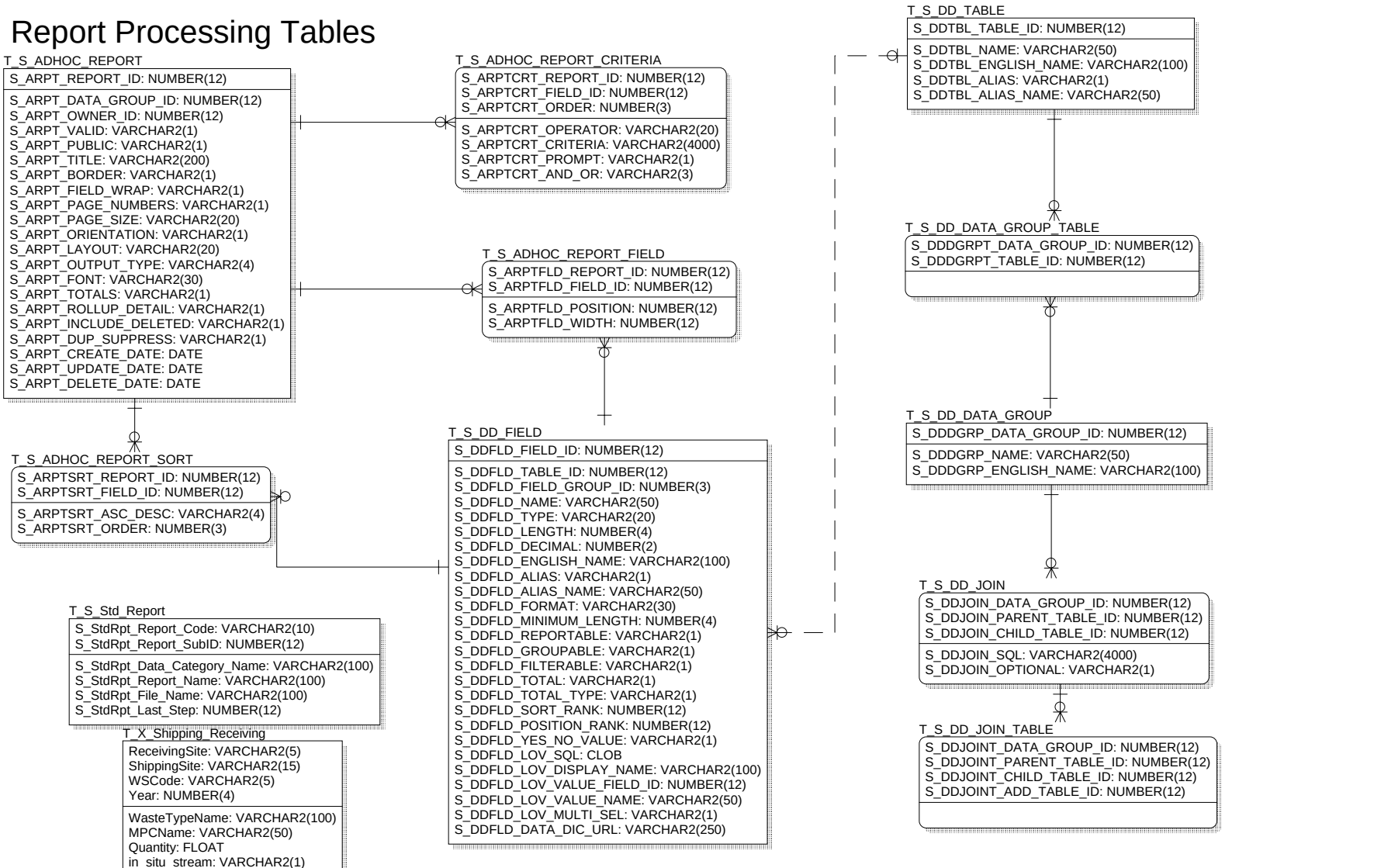
T_F_Area
F_Area_DS_ID: NUMBER(3)
F_Area_Num: CHAR(3)
F_Area_Site_Num: NUMBER(12)
F_Area_Name: VARCHAR2(35)

T_F_Property
F_Prop_Seq_Num: NUMBER(12)
F_Prop_DS_ID: NUMBER(3)
F_Prop_Site_Num: NUMBER(12)
F_Prop_Man_Prog_Code: CHAR(2)
F_Prop_Area_Num: CHAR(3)
F_Prop_USCD_Desc: VARCHAR2(50)
F_Prop_ID: VARCHAR2(20)
F_Prop_Type: CHAR(1)
F_Prop_Name: VARCHAR2(40)
F_Prop_Excess_Ind: CHAR(1)
F_Prop_Excess_Year: NUMBER(4)
F_Prop_HazM_Desc: VARCHAR2(50)
F_Prop_Contam_Name: VARCHAR2(40)
F_Prop_OSF_Pri_Qty: FLOAT
F_Prop_OSF_Dimn_Desc: VARCHAR2(15)
F_Prop_OSF_Dimn_English: VARCHAR2(10)
F_Prop_Bld_CMST_Desc: CHAR(1)
F_Prop_Bld_CMST_Status_Date: DATE
F_Prop_Bld_Gross_Sq_Ft: FLOAT
F_Prop_Bld_History_Use: VARCHAR2(100)

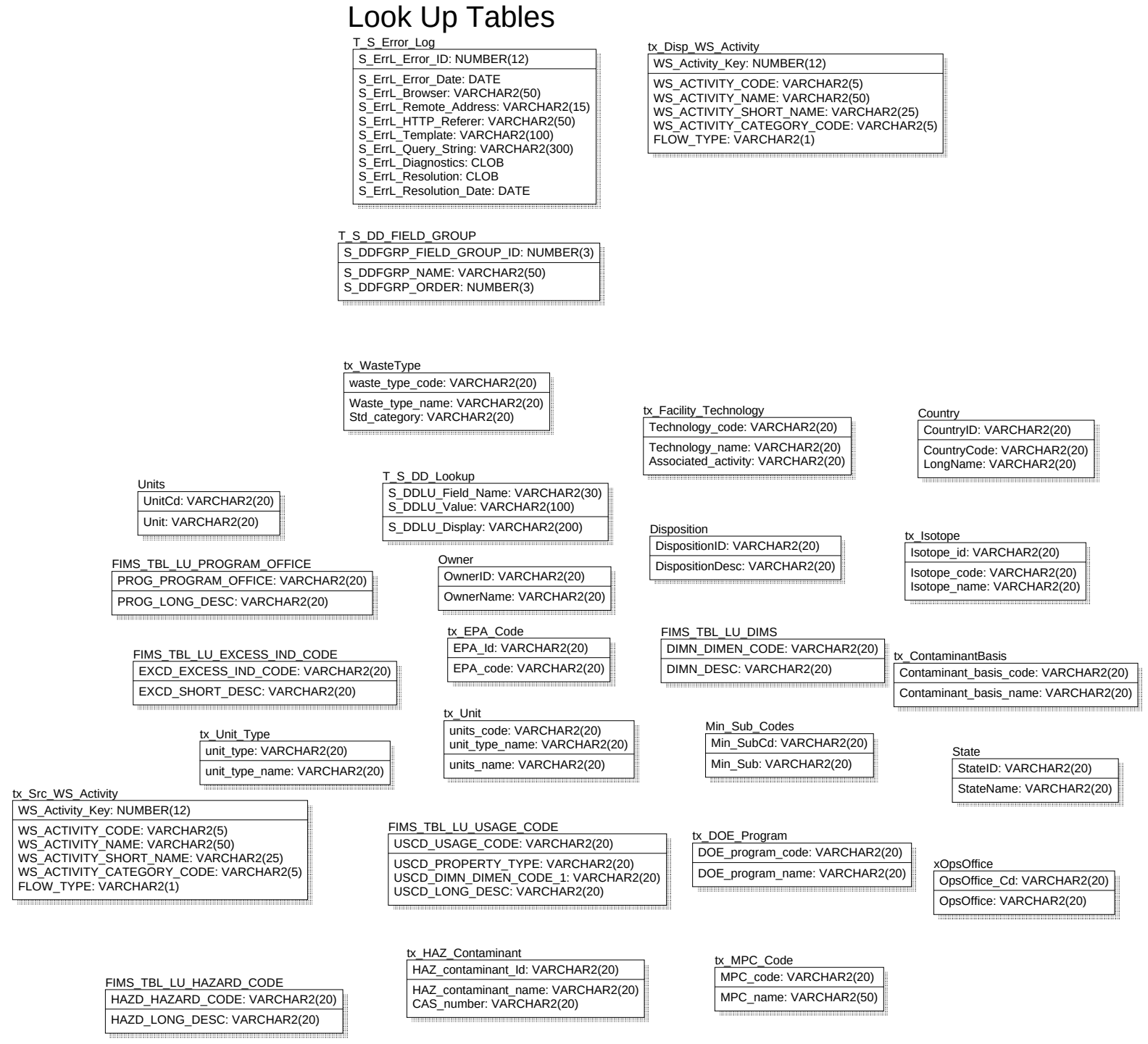
EM Corporate (SDD)



Report Processing Tables



Look Up Tables



APPENDIX B:
Central Internet Database Report Categories

STANDARD REPORTS

Radioactive Waste

Annual and Projected Waste/Material Volumes

RAD-1: Radioactive Waste Stream Annual Quantity Detail

RAD-2: Radioactive Waste Management Activities by Site

RAD-3: Radioactive Waste Management Activities by Selected Years

RAD-4: Radioactive Waste Management Activities by Waste Type

RAD-7: Radioactive Waste Stream Quantities for Selected Management Activities

RAD-8: Radioactive Waste Annual Quantities for Selected Management Activities

RAD-10: Radioactive Waste and SNF Inventory Quantities (includes RAD Waste, Contaminated Media, and Spent Nuclear Fuel)

RAD-11: Disposal Volumes by Disposal Site (includes RAD Waste, Contaminated Media, and Spent Nuclear Fuel)

Waste/Material Characteristic Data (contaminants/isotopes/radioactivity)

RAD-12: Streams by Isotope (includes RAD waste, contaminated media, and spent nuclear fuel)

RAD-13: Radioactive Waste Stream Characteristic Detail

Shipping and Receiving Volumes

RAD-5: Radioactive Waste Shipping and Receiving Summary

RAD-6: Radioactive Waste Annual Shipping and Receiving Quantities

RAD-9: Annual Projections for Radioactive Waste Stream Shipping and Receiving

RAD-14: Shipping and Receiving Summary by Shipping Site

Treatment, Storage and Disposal (TSD) Systems

TSD-1: Treatment and Disposal System Detail by Waste Stream

Contaminated Media

Annual and Projected Waste/Material Volumes

CM-1: Ex-Situ Contaminated Media Stream Annual Quantity Detail

CM-2: Ex-Site Contaminated Media Management Activities by Site

CM-3: Ex-Situ Contaminated Media Management Activities by Selected Years

CM-4: Ex-Situ Contaminated Media Management Activities by Waste Type

CM-7: Ex-Situ Contaminated Media Quantities for Selected Management Activities

CM-8: Ex-Situ Contaminated Media Annual Quantities for Selected Management Activities

Waste/Material Characteristic Data (contaminants/isotopes/radioactivity)

CM-10: In-Situ Contaminated Media

CM-13: Ex-Situ Contaminated Media Stream Characteristic Detail

Shipping and Receiving Volumes

CM-5: Ex-Situ Contaminated Media Shipping and Receiving Summary

CM-6: Ex-Situ Contaminated Media Annual Shipping and Receiving Quantities

CM-9: Annual Projections for Ex-Situ Contaminated Media Stream Shipping and Receiving

CM-14: Contaminated Media Shipping and Receiving Summary by Shipping Site

Combined Radioactive Waste and Ex-Situ Contaminated Media

Annual and Projected Waste/Material Volumes

RAD/CM-1: Combined Radioactive Waste and Ex-Situ Contaminated Media Stream Annual Quantity Detail

RAD/CM-2: Combined Radioactive Waste and Ex-Situ Contaminated Media Activities by Site

RAD/CM-3: Combined Radioactive Waste and Ex-Situ Contaminated Media Management Activities by Selected Years

RAD/CM-4: Combined Radioactive Waste and Ex-Situ Contaminated Media Management Activities by Waste Type

RAD/CM-7: Combined Radioactive Waste and Ex-Situ Contaminated Media Quantities for Selected Management Activities

RAD/CM-8: Combined Radioactive Waste and Ex-Situ Contaminated Media Annual Quantities for Selected Management Activities

Waste/Material Characteristic Data (contaminants/isotopes/radioactivity)

RAD/CM-13: Combined Radioactive Waste and Ex-Situ Contaminated Media Stream Characteristic Detail

Shipping and Receiving Volumes

RAD/CM-5: Combined Radioactive Waste and Ex-Situ Contaminated Media Shipping and Receiving Summary

RAD/CM-6: Combined Radioactive Waste and Ex-Situ Contaminated Media Annual Shipping and Receiving Quantities

RAD/CM-9: Annual Projections for Radioactive Waste and Ex-Situ Contaminated Media Stream Shipping and Receiving

RAD/CM-14: Combined Radioactive Waste and Ex-Situ Contaminated Media Shipping and Receiving Summary by Shipping Site

Buried Transuranic Waste - TBD

Spent Nuclear Fuel

Annual and Projected Waste/Material Volumes

SNF-1: SNF Stream Detail Report

SNF-2: Management Activity Quantities by Site

SNF-3: Management Activity Quantities by Date Range

SNF-4: Shipping and Receiving Summary

SNF-5: Annual Shipping and Receiving Quantities

SNF-6: Annual Quantities for Selected Management Activities

SNF-7: Annual Projections for Shipping and Receiving

SNF-8: Streams by Source Reactor

SNF-9: Streams by Facility

SNF-10: Stream Characteristics Detail Report

Facilities

FAC-1: Facility Detail Report by Site

FAC-2: Facility Summary Report by Site

FAC-3: Facilities by Contamination Type for Selected Sites

Non-Radioactive Waste

NRAD-1: Non-Radioactive Hazardous Waste

NRAD-2: Non-Radioactive Sanitary Waste

Toxic Release Inventory (TRI)

TRI-1: TRI Reporting Data by Reporting Year

TRI-2: TRI Reporting Data for Selected Chemicals

Materials in Inventory (MIN)

MIN-1: Materials in Inventory (MIN) Detail Report

MIN-2: Materials in Inventory by MIN Category

READY TO READ REPORTS

Summary Reports

SUM-1: DOE Waste Generating Sites in the Current Year

SUM-2: Annual Amounts of Waste Generation

SUM-3: DOE Current Year Waste and SNF Inventories by Site

SUM-4: DOE Current Year Waste and SNF Inventories by Program

SUM-5: DOE Waste and SNF Management Activities for the Current Year

SUM-6: DOE Current Year Shipping and Receiving Activity

SUM-7: DOE Annual Amounts of Waste and SNF in Inventory

SUM-8: Comprehensive Site Profile Report

SUM-9: Program Profile Report

SUM-10: State Profile Report

SUM-11: Comprehensive Year Profile Report

SUM-12: DOE Waste and SNF Management Activity Quantities in the Current Year by Site

APPENDIX C:
Standard Report Formats

Central Internet Database — *Annual Stream Quantity Detail (RAD-1)*

Data Category: Radioactive Waste

STATE: Washington **OPERATIONS OFFICE:** Richland Operations Office **PROGRAM:** Office of Environmental Management
SITE: Hanford **WASTE TYPE**: Low Level Waste

LLW Soils 100/300 Area — **Waste Stream Code: 1234**

Source Site: Site A **Activity:** XXXXX **TSD System:** XXXXX
Destination Site: Site B **Activity:** XXXXX **TSD System:** XXXXX

Quantities by Year (m^3)*

Year	Addition Quantity	Disposition Quantity	Inventory Quantity	Year	Addition Quantity	Disposition Quantity	Inventory Quantity	Year	Addition Quantity	Disposition Quantity	Inventory Quantity
1997 (A)*	####	####	####	2007 (P)*	####	####	####	2041-45 (P)*	####	####	####
1998 (A)*	####	####	####	2008 (P)*	####	####	####	2046-50 (P)*	####	####	####
1999 (P)*	####	####	####	2009 (P)*	####	####	####	2051-55 (P)*	####	####	####
2000 (P)*	####	####	####	2010 (P)*	####	####	####	2056-60 (P)*	####	####	####
2001 (P)*	####	####	####	2011-15 (P)*	####	####	####	2061-65 (P)*	####	####	####
2002 (P)*	####	####	####	2016-20 (P)*	####	####	####	2066-70 (P)*	####	####	####
2003 (P)*	####	####	####	2021-25 (P)*	####	####	####	Non-Annualized	####	####	####
2004 (P)*	####	####	####	2026-30 (P)*	####	####	####				
2005 (P)*	####	####	####	2031-35 (P)*	####	####	####	Totals (FY 99+)	####	####	
2006 (P)*	####	####	####	2036-40 (P)*	####	####	####				

Stabilized Tanks — **Waste Stream Code: 5678**

Source Site: Site A **Activity:** XXXXX **TSD System:** XXXXX
Destination Site: Site B **Activity:** XXXXX **TSD System:** XXXXX

Quantities by Year (m^3)*

Year	Addition Quantity	Disposition Quantity	Inventory Quantity	Year	Addition Quantity	Disposition Quantity	Inventory Quantity	Year	Addition Quantity	Disposition Quantity	Inventory Quantity
1997 (A)*	####	####	####	2007 (P)*	####	####	####	2041-45 (P)*	####	####	####
1998 (A)*	####	####	####	2008 (P)*	####	####	####	2046-50 (P)*	####	####	####
1999 (P)*	####	####	####	2009 (P)*	####	####	####	2051-55 (P)*	####	####	####
2000 (P)*	####	####	####	2010 (P)*	####	####	####	2056-60 (P)*	####	####	####
2001 (P)*	####	####	####	2011-15 (P)*	####	####	####	2061-65 (P)*	####	####	####
2002 (P)*	####	####	####	2016-20 (P)*	####	####	####	2066-70 (P)*	####	####	####
2003 (P)*	####	####	####	2021-25 (P)*	####	####	####	Non-Annualized	####	####	####
2004 (P)*	####	####	####	2026-30 (P)*	####	####	####				
2005 (P)*	####	####	####	2031-35 (P)*	####	####	####	Totals (FY 99+)	####	####	
2006 (P)*	####	####	####	2036-40 (P)*	####	####	####				

(A)* = Actual Volumes

(P)* = Projected Volumes

* For Vitrified HLW, quantities are shown in "Number of HLW Canisters."

Central Internet Database

Management Activity Quantities by Site (RAD-2)

Data Category: Radioactive Waste

STATE: Washington
WASTE TYPE: HLW
OPERATIONS OFFICE: Richland
YEAR RANGE: 1999-2000 (Projected)
PROGRAM: **Office of Environmental Management**
PHYSICAL FORM: Groundwater/Wastewater Quantities Only

Site	Starting Inventory (m^3)*	Addition Quantity (m^3)*			Treatment Quantity (m3)*			Disposal Quantity (m3)*			TBD Dispositions (m^3)*	Other (m^3)**	Ending Inventory (m^3)*
		New	Process Outputs	Receipts	On-Site	Off-Site	TBD-Site	On-Site	Off-Site	TBD-Site			
Site 1	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####
Site 2	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####
Site 3	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####
Site 4	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####
TOTAL	#####	**#####**	**#####**	**#####**	**#####**	**#####**	**#####**	**#####**	**#####**	**#####**	**#####**	**#####**	#####

STATE: Washington
WASTE TYPE: LLW
OPERATIONS OFFICE: Richland
YEAR RANGE: 1999-2000 (Projected)
PROGRAM: Office of Environmental Management
PHYSICAL FORM: Groundwater/Wastewater Quantities Only

Site	Starting Inventory (m^3)*	Addition Quantity (m^3)*			Treatment Quantity (m3)*			Disposal Quantity (m3)*			TBD Dispositions (m^3)*	Other (m^3)**	Ending Inventory (m^3)*
		New	Process Outputs	Receipts	On-Site	Off-Site	TBD-Site	On-Site	Off-Site	TBD-Site			
Site 1	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####
Site 2	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####
Site 3	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####
Site 4	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####
TOTAL	#####	**#####**	**#####**	**#####**	**#####**	**#####**	**#####**	**#####**	**#####**	**#####**	**#####**	**#####**	#####

* For Vitrified HLW, quantities are shown in "Number of HLW Canisters."

** Other includes NPDES discharge, recycle, other processing, and return to remediation unit.

Central Internet Database

Management Activity Quantities by Date Range (RAD-3)

Data Category: Radioactive Waste

STATE: Washington
OPERATIONS OFFICE: Richland
SITE: Hanford
WASTE TYPE: Low Level Waste
PROGRAM: Office of Environmental Management
YEAR RANGE: 1998 - 2000
PHYSICAL FORM: Groundwater/Wastewater Quantities Only

Year	Starting Inventory (m^3)*	Addition Quantity (m^3)*			Treatment Quantity (m^3)*			Disposal Quantity (m^3)*			TBD Dispositions (m^3)*	Other (m^3)**	Ending Inventory (m^3)*
		New	Process Outputs	Receipts	On-Site	Off-Site	TBD-Site	On-Site	Off-Site	TBD-Site			
1998 (A)*	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####
1999 (P)*	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####
2000 (P)*	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####
TOTAL for Years Selected		#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	

STATE: Washington
OPERATIONS OFFICE: Richland
SITE: Hanford
WASTE TYPE: Mixed Low Level Waste
PROGRAM: Office of Environmental Management
YEAR RANGE: 1998 - 2000
PHYSICAL FORM: Groundwater/Wastewater Quantities Only

Year	Starting Inventory (m^3)*	Addition Quantity (m^3)*			Treatment Quantity (m^3)*			Disposal Quantity (m^3)*			TBD Dispositions (m^3)*	Other (m^3)**	Ending Inventory (m^3)*
		New	Process Outputs	Receipts	On-Site	Off-Site	TBD-Site	On-Site	Off-Site	TBD-Site			
1998 (A)*	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####
1999 (P)*	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####
2000 (P)*	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####
TOTAL for Years Selected		#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	

(A)* = Actual Volumes
(P)* = Projected Volumes
* For Vitrified HLW, quantities are shown in "Number of HLW Canisters."
** Other includes NPDES discharge, recycle, other processing, return to remediation unit.

Central Internet Database

Management Activity Quantities by Waste Type (RAD-4)

Data Category: Radioactive Waste

STATE: Washington **Year Range:** 1998 - 2000 **PROGRAM:** Office of Environmental Management

OPERATIONS OFFICE: All **PHYSICAL FORM:** Groundwater/Wastewater Quantities Only

SITE: Hanford

Waste Type	Starting Inventory (m^3)*	Addition Quantity (m^3)*			Treatment Quantity (m3)*			Disposal Quantity (m3)*			TBD Dispositions ($m^{3)}$	Other (m^3)**	Ending Inventory (m^3)
		New	Process Outputs	Receipts	On-Site	Off-Site	TBD-Site	On-Site	Off-Site	TBD-Site			
HLW	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####
HLW - Vitrified*	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####
TRU	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####
MLLW	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####
LLW	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####
Other***	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####
TOTAL		#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	

* For Vitrified HLW, quantities are shown in "Number of HLW Canisters."

** The management activity of "Other" includes NPDES discharge, recycle, other processing, return to remediation unit, on site placement.

*** The waste type of "Other" includes 11e2.

Central Internet Database — *Shipping and Receiving Summary (RAD-5)*

Data Category: Radioactive Waste

YEAR RANGE: 1999-2000 **PROGRAM:** Office of Environmental Management
WASTE TYPE: Low Level Waste **PHYSICAL FORM:** Groundwater/Wastewater Quantities Only

Quantity (m3)*

Receiving Site / Shipping Site	Hanford	INEEL	Los Alamos	Nevada Test Site	Oak Ridge	Savannah River	Waste Isolation Pilot Plant	Commercial and Other DOE Sites**	TBD Site	Shipping Total
Site 1	####	####	####	####	####	####	####	####	####	######
Site 2	####	####	####	####	####	####	####	####	####	######
Site 3	####	####	####	####	####	####	####	####	####	######
Site 4	####	####	####	####	####	####	####	####	####	######
Site 5	####	####	####	####	####	####	####	####	####	######
Total	#####	#####	#####	#####	#####	#####	#####	#####	#####	######

YEAR RANGE: 1999-2000 **PROGRAM:** Office of Environmental Management
WASTE TYPE: Mixed Low Level Waste **PHYSICAL FORM:** Groundwater/Wastewater Quantities Only

Quantity (m3)*

Receiving Site / Shipping Site	Hanford	INEEL	Los Alamos	Nevada Test Site	Oak Ridge	Savannah River	Waste Isolation Pilot Plant	Commercial and Other DOE Sites**	TBD Site	Shipping Total
Site 1	####	####	####	####	####	####	####	####	####	######
Site 2	####	####	####	####	####	####	####	####	####	######
Site 3	####	####	####	####	####	####	####	####	####	######
Site 4	####	####	####	####	####	####	####	####	####	######
Site 5	####	####	####	####	####	####	####	####	####	######
Total	#####	#####	#####	#####	#####	#####	#####	#####	#####	######

* For Vitrified HLW, quantities are shown in "Number of HLW Canisters."

** For 1999 data, Other DOE Sites include Cheney Disposal Cell in Utah for 11e2 and LLW and Geologic Repository disposal for Vitrified HLW.

Central Internet Database

Annual Shipping and Receiving Quantites (RAD-6)

Data Category: Radioactive Waste

RECEIVING SITE: Hanford **PROGRAM:** Office of Environmental Management **WASTE TYPE:** Low Level Waste

Shipping Site	Quantity (m^3)** by Waste Type													
	1998 (A)*	1999 (P)*	2000 (P)*	2001 (P)*	2002 (P)*	2003 (P)*	2004 (P)*	2005 (P)*	2006 (P)*	2007 (P)*	2008 (P)*	2009 (P)*	2010 (P)*	2011-70(P)* & Non-Annualized
Site A	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####
Site B	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####
Site C	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####
Site D	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####
Total	######	######	######	######	######	######	######	######	######	######	######	######	######	######

RECEIVING SITE: Hanford **PROGRAM:** Office of Environmental Management **WASTE TYPE:** Mixed Low Level Waste

Shipping Site	Quantity (m^3)** by Waste Type													
	1998 (A)*	1999 (P)*	2000 (P)*	2001 (P)*	2002 (P)*	2003 (P)*	2004 (P)*	2005 (P)*	2006 (P)*	2007 (P)*	2008 (P)*	2009 (P)*	2010 (P)*	2011-70(P)* & Non-Annualized
Site A	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####
Site B	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####
Site C	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####
Site D	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####
Total	######	######	######	######	######	######	######	######	######	######	######	######	######	######

(A)* = Actual Volume

(P)* = Projected Volumes

* *For Vitrified HLW, quantities are shown in "Number of HLW Canisters."

Central Internet Database

Stream Quantities for Selected Management Activities (RAD-7)

Data Category: Radioactive Waste

STATE: California **YEAR RANGE:** All **PROGRAM:** Office of Environmental Management
ACTIVITY: Disposal **PHYSICAL FORM:** Groundwater/Wastewater Quantities Only

Site	Quantity (m^3)					
	HLW	**HLW - Vitrified***	**LLW**	**MLLW**	**TRU**	**Other**
Site 1	####	####	####	####	####	####
Site 2	####	####	####	####	####	####
Site 3	####	####	####	####	####	####
Site 4	####	####	####	####	####	####
Site 5	####	####	####	####	####	####
Site 6	####	####	####	####	####	####
Total	####	####	####	####	####	####

STATE: Washington **YEAR RANGE:** All **PROGRAM:** Office of Environmental Management
ACTIVITY: Disposal **PHYSICAL FORM**: Groundwater/Wastewater Quantities Only

Site	Quantity (m^3)					
	HLW	**HLW - Vitrified***	**LLW**	**MLLW**	**TRU**	**Other**
Site 1	####	####	####	####	####	####
Site 2	####	####	####	####	####	####
Total	####	####	####	####	####	####

* For Vitrified HLW, quantities are shown in "Number of HLW Canisters."

Central Internet Database

Annual Quantities for Selected Management Activities (RAD-8)

Data Category: Radioactive Waste

STATE: New York
SITE: Brookhaven
OPERATIONS OFFICE: Chicago
PROGRAM: Office of Environmental Management
ACTIVITY: Disposal - On-Site
PHYSICAL FORM: Groundwater/Wastewater Quantities Only

Waste Type	Quantity (m^3) by Waste Type													
	1998 (A)*	1999 (P)*	2000 (P)*	2001 (P)*	2002 (P)*	2003 (P)*	2004 (P)*	2005 (P)*	2006 (P)*	2007 (P)*	2008 (P)*	2009 (P)*	2010 (P)*	2011-70(P)* & Non-
HLW	####	####	####	####	####	####	####	####	####	####	####	####	####	####
HLW - Vitrified*	####	####	####	####	####	####	####	####	####	####	####	####	####	####
MLLW	####	####	####	####	####	####	####	####	####	####	####	####	####	####
LLW	####	####	####	####	####	####	####	####	####	####	####	####	####	####
TRU	####	####	####	####	####	####	####	####	####	####	####	####	####	####
Other**	####	####	####	####	####	####	####	####	####	####	####	####	####	####

STATE: Washington
SITE: West Valley
OPERATIONS OFFICE: Ohio
PROGRAM: Office of Environmental Management
ACTIVITY: Disposal - On-Site
PHYSICAL FORM: Groundwater/Wastewater Quantities Only

Waste Type	Quantity (m^3) by Waste Type													
	1998 (A)*	1999 (P)*	2000 (P)*	2001 (P)*	2002 (P)*	2003 (P)*	2004 (P)*	2005 (P)*	2006 (P)*	2007 (P)*	2008 (P)*	2009 (P)*	2010 (P)*	2011-70(P)* & Non-Annualized
HLW	####	####	####	####	####	####	####	####	####	####	####	####	####	####
HLW - Vitrified*	####	####	####	####	####	####	####	####	####	####	####	####	####	####
MLLW	####	####	####	####	####	####	####	####	####	####	####	####	####	####
LLW	####	####	####	####	####	####	####	####	####	####	####	####	####	####
TRU	####	####	####	####	####	####	####	####	####	####	####	####	####	####
Other**	####	####	####	####	####	####	####	####	####	####	####	####	####	####

(A)* = Actual Volumes

(P)* = Projected Volumes

* For Vitrified HLW, quantities are shown in "Number of HLW Canisters."

** The waste type of "Other" includes 11e2 and Unspecified Waste Type

Data Category: Radioactive Waste

RECEIVING SITE: Hanford **WASTE TYPE:** Low Level Waste

STATE: California

Hanford - Low Level Waste - Stream 1

	Year	Quantity Shipped (m^3)**	Year	Quantity Shipped (m^3)**	Year	Quantity Shipped (m^3)**	Year	Quantity Shipped (m^3)**	Year	Quantity Shipped (m^3)**
Shipping Site - Site A	1998 (A)*	#####	2003(P)*	#####	2008(P)*	#####	2021-25(P)*	#####	2046-50(P)*	#####
	1999 (P)*	#####	2004(P)*	#####	2009(P)*	#####	2026-30(P)*	#####	2051-55(P)*	#####
	2000 (P)*	#####	2005(P)*	#####	2010(P)*	#####	2031-35(P)*	#####	2056-60(P)*	#####
	2001 (P)*	#####	2006(P)*	#####	2011-15(P)*	#####	2036-40(P)*	#####	2061-65(P)*	#####
	2002 (P)*	#####	2007(P)*	#####	2016-20(P)*	#####	2041-45(P)*	#####	2065-70(P)*	#####
									Non-Annualized	#####

Hanford - Low Level Waste - Stream 2

	Year	Quantity Shipped (m^3)**	Year	Quantity Shipped (m^3)**	Year	Quantity Shipped (m^3)**	Year	Quantity Shipped (m^3)**	Year	Quantity Shipped (m^3)**
Shipping Site - Site A	1998 (A)*	#####	2003(P)*	#####	2008(P)*	#####	2021-25(P)*	#####	2046-50(P)*	#####
	1999 (P)*	#####	2004(P)*	#####	2009(P)*	#####	2026-30(P)*	#####	2051-55(P)*	#####
	2000 (P)*	#####	2005(P)*	#####	2010(P)*	#####	2031-35(P)*	#####	2056-60(P)*	#####
	2001 (P)*	#####	2006(P)*	#####	2011-15(P)*	#####	2036-40(P)*	#####	2061-65(P)*	#####
	2002 (P)*	#####	2007(P)*	#####	2016-20(P)*	#####	2041-45(P)*	#####	2065-70(P)*	#####
									Non-Annualized	#####

Hanford - Low Level Waste - Stream 3

	Year	Quantity Shipped (m^3)**	Year	Quantity Shipped (m^3)**	Year	Quantity Shipped (m^3)**	Year	Quantity Shipped (m^3)**	Year	Quantity Shipped (m^3)**
Shipping Site - Site B	1998 (A)*	#####	2003(P)*	#####	2008(P)*	#####	2021-25(P)*	#####	2046-50(P)*	#####
	1999 (P)*	#####	2004(P)*	#####	2009(P)*	#####	2026-30(P)*	#####	2051-55(P)*	#####
	2000 (P)*	#####	2005(P)*	#####	2010(P)*	#####	2031-35(P)*	#####	2056-60(P)*	#####
	2001 (P)*	#####	2006(P)*	#####	2011-15(P)*	#####	2036-40(P)*	#####	2061-65(P)*	#####
	2002 (P)*	#####	2007(P)*	#####	2016-20(P)*	#####	2041-45(P)*	#####	2065-70(P)*	#####
									Non-Annualized	#####

(A)* = Actual Volume

(P)* = Projected Volumes

** For Vitrified HLW, quantities are shown in "Number of HLW Canisters."

Data Category: Radioactive Waste

STATE: Washington
OPERATIONS OFFICE: Richland Operations Office
PHYSICAL FORM: Groundwater/Wastewater Quantities Only
YEAR RANGE: 1999
PROGRAM: Office of Environmental Management

Site	Quantity (m^3)						
	HLW	HLW - Vitrified*	LLW	MLLW	TRU	SNF**	Other
Site 1	####	####	####	####	####	####	####
Site 2	####	####	####	####	####	####	####
Site 3	####	####	####	####	####	####	####
Site 4	####	####	####	####	####	####	####
Site 5	####	####	####	####	####	####	####
Site 6	####	####	####	####	####	####	####
Total	####	####	####	####	####	####	####

* For Vitrified HLW, quantities are shown in "Number of HLW Canisters."
** SNF quantities are shown in "Metric Tons of Heavy Metal (MTHM)."

Central Internet Database — *Disposal Volumes by by Disposal Site (RAD-11)*

Data Category: Radioactive Waste

STATE: Washington
PHYSICAL FORM: All Physical Forms
YEAR RANGE: 1998
OPERATIONS OFFICE: Richland Operations Office
DISPOSAL SITE: Site 1
PROGRAM: Groundwater/Wastewater Quantities Only

Site	Quantity (m^3)						
	HLW	HLW - Vitrified*	LLW	MLLW	TRU	SNF**	Other
Site A	####	####	####	####	####	####	####
Site B	####	####	####	####	####	####	####
Site C	####	####	####	####	####	####	####
Site D	####	####	####	####	####	####	####
Site E	####	####	####	####	####	####	####
Total	####	####	####	####	####	####	####

STATE: Washington
PHYSICAL FORM: All Physical Forms
YEAR RANGE: 1998
OPERATIONS OFFICE: Richland Operations Office
DISPOSAL SITE: Site 2
PROGRAM: Groundwater/Wastewater Quantities Only

Site	Quantity (m^3)						
	HLW	HLW - Vitrified*	LLW	MLLW	TRU	SNF**	Other
Site A	####	####	####	####	####	####	####
Site B	####	####	####	####	####	####	####
Site C	####	####	####	####	####	####	####
Site D	####	####	####	####	####	####	####
Site E	####	####	####	####	####	####	####
Total	####	####	####	####	####	####	####

* For Vitrified HLW, quantities are shown in "Number of HLW Canisters."
** SNF quantities are reported in Metric Tons of Heavy Metal (MTHM)

Data Category: Radioactive Waste

STATE: Washington **SITE**: Hanford

Isotope: Uranium-235

Stream Name	Generating Program	Stream Type	Current Year Inventory (m^3)*	Curies	Concentration		
					Average	Low Limit	Upper Limit
Stream 1	EM	Ex Situ Contaminated Media	####	####	####	####	####
Stream 2	DP	In Situ Contaminated Media	####	####	####	####	####
Stream 3	DP	Radioactive Waste	####	####	####	####	####

Isotope: Plutonium-238

Stream Name	Generating Program	Stream Type	Current Year Inventory (m^3)*	Curies	Concentration		
					Average	Low Limit	Upper Limit
Stream 1	EM	Spent Nuclear Fuel	####	####	####	####	####
Stream 2	DP	Radioactive Waste	####	####	####	####	####

*Current Year Inventory Volumes are in Metric Tons of Heavy Metal (MTHM) for Spent Nuclear Fuel (SNF) streams and cubic meters (m^3) for all other stream types

Central Internet Database — *Stream Characteristics Detail (RAD-13)*

Data Category: Radioactive Waste

STATE: Washington | **PROGRAM:** Office of Environmental Management | **WASTE TYPE:** Low Level Waste
SITE: Hanford | **OPERATIONS OFFICE:** Richland

Hanford - LLW: LLW Soils 100/300 Area						**Waste Stream Code:** 1234
% of Stream	**STREAM NAME:** XXXXXX			**MPC NAME:** XXXXX	**TOTAL CURRIES:** XXXXXX	
50	**Profile 1**	**Isotopes:**	Isotope 1	**Avg Concentration:** XXX	**Low Limit Concent:** XXX	**Upper Limit Concent:** XXX
			Isotope 2	**Avg Concentration:** XXX	**Low Limit Concent:** XXX	**Upper Limit Concent:** XXX
		Contaminants:	Contaminants 1	**Avg Concentration:** XXX	**Low Limit Concent:** XXX	**Upper Limit Concent:** XXX
			Contaminants 2	**Avg Concentration:** XXX	**Low Limit Concent:** XXX	**Upper Limit Concent:** XXX
25	**Profile 2**	**Isotopes:**	Isotope 1	**Avg Concentration:** XXX	**Low Limit Concent:** XXX	**Upper Limit Concent:** XXX
			Isotope 2	**Avg Concentration:** XXX	**Low Limit Concent:** XXX	**Upper Limit Concent:** XXX
		Contaminants:	Contaminants 1	**Avg Concentration:** XXX	**Low Limit Concent:** XXX	**Upper Limit Concent:** XXX
			Contaminants 2	**Avg Concentration:** XXX	**Low Limit Concent:** XXX	**Upper Limit Concent:** XXX
25	**Profile 3**	**Isotopes:**	Isotope 1	**Avg Concentration:** XXX	**Low Limit Concent:** XXX	**Upper Limit Concent:** XXX
			Isotope 2	**Avg Concentration:** XXX	**Low Limit Concent:** XXX	**Upper Limit Concent:** XXX
		Contaminants:	Contaminants 1	**Avg Concentration:** XXX	**Low Limit Concent:** XXX	**Upper Limit Concent:** XXX
			Contaminants 2	**Avg Concentration:** XXX	**Low Limit Concent:** XXX	**Upper Limit Concent:** XXX

Hanford - LLW: Stabilized Tanks						**Waste Stream Code:** 5678
% of Stream	**Stream Name:** XXXXXX			**MPC Name:** XXXXX	**Total Curies:** XXXXXX	
15	**Profile 1**	**Isotopes:**	Isotope 1	**Avg Concentration:** XXX	**Low Limit Concent:** XXX	**Upper Limit Concent:** XXX
			Isotope 2	**Avg Concentration:** XXX	**Low Limit Concent:** XXX	**Upper Limit Concent:** XXX
		Contaminants:	Contaminants 1	**Avg Concentration:** XXX	**Low Limit Concent:** XXX	**Upper Limit Concent:** XXX
			Contaminants 2	**Avg Concentration:** XXX	**Low Limit Concent:** XXX	**Upper Limit Concent:** XXX
30	**Profile 2**	**Isotopes:**	Isotope 1	**Avg Concentration:** XXX	**Low Limit Concent:** XXX	**Upper Limit Concent:** XXX
			Isotope 2	**Avg Concentration:** XXX	**Low Limit Concent:** XXX	**Upper Limit Concent:** XXX
		Contaminants:	Contaminants 1	**Avg Concentration:** XXX	**Low Limit Concent:** XXX	**Upper Limit Concent:** XXX
			Contaminants 2	**Avg Concentration:** XXX	**Low Limit Concent:** XXX	**Upper Limit Concent:** XXX
55	**Profile 3**	**Isotopes:**	Isotope 1	**Avg Concentration:** XXX	**Low Limit Concent:** XXX	**Upper Limit Concent:** XXX
			Isotope 2	**Avg Concentration:** XXX	**Low Limit Concent:** XXX	**Upper Limit Concent:** XXX
		Contaminants:	Contaminants 1	**Avg Concentration:** XXX	**Low Limit Concent:** XXX	**Upper Limit Concent:** XXX
			Contaminants 2	**Avg Concentration:** XXX	**Low Limit Concent:** XXX	**Upper Limit Concent:** XXX

Central Internet Database

Shipping and Receiving Summary By Shipping Site (RAD-14)

Data Category: Radioactive Waste

STATE: Washington **SHIPPING SITE:** Hanford **WASTE TYPE:** LLW

Quantity (m3)**

Receiving Sites	1998 (A)*	1999 (P)*	2000 (P)*	2001 (P)*	2002 (P)*	2003 (P)*	2004 (P)*	2005 (P)*	2006 (P)*	2007 (P)*	2008 (P)*	2009 (P)*	2010 (P*)	2011-2070 & Non-Annulized (P*)
Site A	####	####	####	####	####	####	####	####	####	####	####	####	####	####
Site B	####	####	####	####	####	####	####	####	####	####	####	####	####	####
Site C	####	####	####	####	####	####	####	####	####	####	####	####	####	####
Total	####	####	####	####	####	####	####	####	####	####	####	####	####	####

STATE: Washington **SHIPPING SITE:** Hanford **WASTE TYPE:** MLLW

Quantity (m3)**

Receiving Sites	1998 (A)*	1999 (P)*	2000 (P)*	2001 (P)*	2002 (P)*	2003 (P)*	2004 (P)*	2005 (P)*	2006 (P)*	2007 (P)*	2008 (P)*	2009 (P)*	2010 (P)*	2011-2070 & Non-Annulized (P)*
Site D	####	####	####	####	####	####	####	####	####	####	####	####	####	####
Site E	####	####	####	####	####	####	####	####	####	####	####	####	####	####
Site F	####	####	####	####	####	####	####	####	####	####	####	####	####	####
Site G	####	####	####	####	####	####	####	####	####	####	####	####	####	####
Total	####	####	####	####	####	####	####	####	####	####	####	####	####	####

TREATMENT/DISPOSAL SYSTEM NAME: TOSCA Incinerator
TREATMENT/DISPOSAL TECHNOLOGY: Incineration
SITE: Hanford
PROGRAM: Office of Environmental Management

Stream Type: MLLW

Stream Number	Stream Name	Quantity (m^3) by Year													
		1998 (A)*	1999 (P)*	2000 (P)*	2001 (P)*	2002 (P)*	2003 (P)*	2004 (P)*	2005 (P)*	2006 (P)*	2007 (P)*	2008 (P)*	2009 (P)*	2010 (P)*	2011-70(P)* & Non-Annualized
XXXX	Mixed Waste Material	####	####	####	####	####	####	####	####	####	####	####	####	####	####
XXXX	MLLW-Contam Debris	####	####	####	####	####	####	####	####	####	####	####	####	####	####

Stream Type: LLW

Stream Number	Stream Name	Quantity (m^3) by Year													
		1998 (A)*	1999 (P)*	2000 (P)*	2001 (P)*	2002 (P)*	2003 (P)*	2004 (P)*	2005 (P)*	2006 (P)*	2007 (P)*	2008 (P)*	2009 (P)*	2010 (P)*	2011-70(P)* & Non-Annualized
XXXX	LLW Stream 1	####	####	####	####	####	####	####	####	####	####	####	####	####	####
XXXX	LLW Stream 2	####	####	####	####	####	####	####	####	####	####	####	####	####	####
XXXX	LLW Stream 3	####	####	####	####	####	####	####	####	####	####	####	####	####	####
XXXX	LLW Stream 4	####	####	####	####	####	####	####	####	####	####	####	####	####	####

(A)* = Actual Volumes
(P)* = Projected Volumes

Data Category: Contaminated Media

STATE: Washington **PROGRAM:** Office of Environmental Management **WASTE TYPE:** Low Level Waste
SITE: Hanford

Hanford - LLW - Stream 1

Stream Code: 1234 **Generating Program:** Defense Programs **MPC Name:** XXXXX **Total Curies:** XXXX

Approved Volume: XXXX **Future Volume Avg**: XXXX
Future Volume Lower Limit: XXXX
Future Volume Upper Limit: XXXX

Source Site:	Site A	**Activity:**	XXXXX	**TSD System:**	XXXXX	**Estimated Volume Avg**: XXXX
Destination Site:	Site B	**Activity:**	XXXXX	**TSD System:**	XXXXX	**Lower Limit Volume:** XXXX
						Upper Limit Volume: XXXX

Profile A XX% Volume

Isotopes:

Isotope 1	Avg. Concent: XXX	Low Limit Concent: XXX	Upper Limit Concent: XXX
Isotope 2	Avg. Concent: XXX	Low Limit Concent: XXX	Upper Limit Concent: XXX

Contaminants:

Contaminants 1	Avg. Concent: XXX	Low Limit Concent: XXX	Upper Limit Concent: XXX
Contaminants 2	Avg. Concent: XXX	Low Limit Concent: XXX	Upper Limit Concent: XXX

Central Internet Database — *Detail Report by Site (FAC-1)*

Data Category: Facilities

STATE: Washington **SITE:** Hanford **PROGRAM:** Office of Environmental Management

Area Name	Facility Name	Facility Type	Facility Status	Facility Size	Facility Excessed?	Excess Year	Contamination Type
Area 1	Building 1	Building	Operational	#### Square feet	No	Not Excess	Radiological and Chemical
Area 2	Building 2	Building	Operational	#### Square feet	No	Not Excess	Radiological
Area 3	Building 3	Building	Operational	#### Square feet	No	Not Excess	Chemical
Area 4	Building 4	Building	Shutdown Pending Transfer	#### Square feet	Yes	*Year*	None
Area 5	Building 5	Building	Standby	#### Square feet	Yes	*Year*	None
Area 6	Trailer 1	Trailer	Standby	#### Square feet	No	Not Excess	None
Area 7	Trailer 2	Trailer	Standby	#### Square feet	Yes	*Year*	None
Area 8	Trailer 3	Trailer	Standby	#### Square feet	Yes	*Year*	None
Area 9	Guard tower 1	OSF	Standby	####Feet	No	Not Excess	None
Area 10	Guard tower 2	OSF	Operational	####Feet	No	Not Excess	None
Area 11	Guard tower 3	OSF	Operational	####Feet	No	Not Excess	None
Area 12	Office 1	Building	D&D in Progress	#### Square feet	Yes	*Year*	None
Area 13	Office 2	Building	Operational	#### Square feet	No	Not Excess	None
Area 14	Office 3	Building	Operational	#### Square feet	No	Not Excess	None
Area 15	Hot Cell 1	Building	Operational	#### Tons	No	Not Excess	Radiological and Chemical

Data Category: Facilities

STATE: Washington **SITE:** Hanford **Program:** Office of Environmental Management

Facility Status	Number of Facilities Reported
Operating	####
Operational Standby	##
Shutdown Pending Transfer	##
Shutdown Pending D&D	##
D&D in Progress	#
Total:	#

Facility Contaminant Type	Number of Facilities Reported
Radioactive	####
Chemical	####
Radioactive & Chemical	###
None	###

Material/ Waste Present in Facilities at the Site*	Number of Facilities Reported
HLW	#
LLW	##
MLLW	#
MTRU	#
TRU	#
Source Material	#
SNF	#
Unirradiated Nuclear Fuel	#
Other	#

STATE: Washington **SITE:** PNNL **Program:** Office of Environmental Management

Facility Status	Number of Facilities Reported
Operating	####
Operational Standby	##
Shutdown Pending Transfer	##
Shutdown Pending D&D	##
D&D in Progress	#
Total:	#

Facility Contaminant Type	Number of Facilities Reported
Radioactive	####
Chemical	####
Radioactive & Chemical	###
None	###

Material/ Waste Present in Facilities at the Site*	Number of Facilities Reported
HLW	#
LLW	##
MLLW	#
MTRU	#
TRU	#
Source Material	#
SNF	#
Unirradiated Nuclear Fuel	#
Other	#

Data Category: Facilities

STATE: Washington	**SITE:** Hanford	**PROGRAM:** Office of Environmental Management	**CONTAMINATION TYPE:** Radiological
Facility Name	**Facility Status**	**Current Use**	**Historical Use**
Building 1	Operational	Description of how a building is currently used.	Building operating history.
Building 2	Operational	Description of how a building is currently used.	Building operating history.
Building 3	Operational	Description of how a building is currently used.	Building operating history.
STATE: Washington	**SITE:** Hanford	**PROGRAM:** Office of Environmental Management	**CONTAMINATION TYPE:** Chemical
Facility Name	**Facility Status**	**Current Use**	**Historical Use**
Building 6	Operational	Description of how a building is currently used.	Building operating history
Building 7	Shutdown Pending D&D	Description of how a building is currently used.	Building operating history
Building 9	Shutdown Pending D&D	Description of how a building is currently used.	Building operating history
STATE: Washington	**SITE:** Hanford	**PROGRAM:** Office of Environmental Management	**CONTAMINATION TYPE:** Rad & Chemical
Facility Name	**Facility Status**	**Current Use**	**Historical Use**
Building 10	D&D in Progress	Description of how a building is currently used.	Building operating history
Building 12	Shutdown Pending D&D	Description of how a building is currently used.	Building operating history
Building 13	Operational	Description of how a building is currently used.	Building operating history
STATE: Washington	**SITE:** Hanford	**PROGRAM:** Office of Environmental Management	**CONTAMINATION TYPE:** None
Facility Name	**Facility Status**	**Current Use**	**Historical Use**
Building 14	Operational	Description of how a building is currently used.	Building operating history
Building 15	Operational	Description of how a building is currently used.	Building operating history

Central Internet Database

Non-Radioactive Hazardous Waste (NRAD-1)

Data Category: Non-Radioactive Waste

STATE: California **SITE:** Site A, Site B, Site C

SITE A

Waste Type	Volume (m3) by Year	
	1997	1998
Non-Routine RCRA Waste	####	####
Non-Routine State Waste	####	####
Non-Routine TSCA Waste	####	####
Routine RCRA Waste	####	####
Routine State Waste	####	####
Routine TSCA Waste	####	####
TOTAL	####	####

SITE B

Waste Type	Volume (m3) by Year	
	1997	1998
Non-Routine RCRA Waste	####	####
Non-Routine State Waste	####	####
Non-Routine TSCA Waste	####	####
Routine RCRA Waste	####	####
Routine State Waste	####	####
Routine TSCA Waste	####	####
TOTAL	####	####

SITE C

Waste Type	Volume (m3) by Year	
	1997	1998
Non-Routine RCRA Waste	####	####
Non-Routine State Waste	####	####
Non-Routine TSCA Waste	####	####
Routine RCRA Waste	####	####
Routine State Waste	####	####
Routine TSCA Waste	####	####
TOTAL	####	####

Central Internet Database

Non-Radioactive Sanitary Waste (NRAD-2)

Data Category: Non-Radioactive Waste

STATE: California **SITE:** Site A, Site B, Site C

SITE A

Waste Type	Volume (m3) by Year	
	1997	1998
Non-Routine Sanitary Waste	####	####
Routine Sanitary Waste	####	####
TOTAL	####	####

SITE B

Waste Type	Volume (m3) by Year	
	1997	1998
Non-Routine Sanitary Waste	####	####
Routine Sanitary Waste	####	####
TOTAL	####	####

SITE C

Waste Type	Volume (m3) by Year	
	1997	1998
Non-Routine Sanitary Waste	####	####
Routine Sanitary Waste	####	####
TOTAL	####	####

Central Internet Database — *Reporting Data by Reporting Year (TRI-1)*

Data Category: Toxic Release Inventory (TRI)

STATE: California **REPORTING YEAR:** 1994

SITE: Site A

	On-Site Chemical Releases(lbs)					Off-Site Transfers (lbs)		Source Reduction, Recycling and Waste Management Activities (lbs)							
	Fugitive or Non-Point Air Emissions (Form R - Part II - Section 5.1)	Stack or Point Air Emissions (Form R - Part II - Section 5.2)	Discharges to Receiving Streams or Water Bodies (Form R - Part II - Section 5.3)	On-Site Underground Injection (Form R - Part II - Section 5.4)	On-Site Land Disposal (Form R - Part II - Section 5.5)	Total Transfers to Publicly Owned Treatment Works (Form R - Part II - Section 6.1)	Total Other Transfers (Form R - Part II - Section 6.2)	Quantity Released EPCRA* (Form R - Part II - Section 8.1)	Quantity Onsite Energy Recovery (Form R - Part II - Section 8.2)	Quantity Offsite Energy Recovery (Form R - Part II - Section 8.3)	Quantity Recycled Onsite (Form R - Part II - Section 8.4)	Quantity Recycled Offsite (Form R - Part II - Section 8.5)	Quantity Treated Onsite (Form R - Part II - Section 8.6)	Quantity Treated Offsite (Form R - Part II - Section 8.7)	Quantity Released Non-Production** (Form R - Part II - Section 8.8)
Chem 1	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####
Chem 2	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####
Chem 3	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####
Chem 4	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####

STATE: California **REPORTING YEAR:** 1994

SITE: Site B

	On-Site Chemical Releases(lbs)					Off-Site Transfers (lbs)		Source Reduction, Recycling and Waste Management Activities (lbs)							
	Fugitive or Non-Point Air Emissions (Form R - Part II - Section 5.1)	Stack or Point Air Emissions (Form R - Part II - Section 5.2)	Discharges to Receiving Streams or Water Bodies (Form R - Part II - Section 5.3)	On-Site Underground Injection (Form R - Part II - Section 5.4)	On-Site Land Disposal (Form R - Part II - Section 5.5)	Total Transfers to Publicly Owned Treatment Works (Form R - Part II - Section 6.1)	Total Other Transfers (Form R - Part II - Section 6.2)	Quantity Released EPCRA* (Form R - Part II - Section 8.1)	Quantity Onsite Energy Recovery (Form R - Part II - Section 8.2)	Quantity Offsite Energy Recovery (Form R - Part II - Section 8.3)	Quantity Recycled Onsite (Form R - Part II - Section 8.4)	Quantity Recycled Offsite (Form R - Part II - Section 8.5)	Quantity Treated Onsite (Form R - Part II - Section 8.6)	Quantity Treated Offsite (Form R - Part II - Section 8.7)	Quantity Released Non-Production** (Form R - Part II - Section 8.8)
Chem 1	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####
Chem 2	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####
Chem 3	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####
Chem 4	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####

* Total production related releases (does not include any quantities treated on or off-site

** Total releases to the environment as a result of remedial actions, catastrophic events, or one time events not asssociated with production.

Central Internet Database — *Reporting Data for Selected Chemicals (TRI-2)*

Data Category: Toxic Release Inventory (TRI)

STATE: California **SITE: Hanford**

Chemical A

	On-Site Chemical Releases (lbs)					Off-Site Transfers (lbs)		Source Reduction, Recycling and Waste Management Activities (lbs)							
	Fugitive or Non-Point Air Emissions (Form R - Part II - Section 5.1)	Stack or Point Air Emissions (Form R - Part II - Section 5.2)	Discharges to Receiving Streams or Water Bodies (Form R - Part II - Section 5.3)	On-Site Underground Injection (Form R - Part II - Section 5.4)	On-Site Land Disposal (Form R - Part II - Section 5.5)	Total Transfers to Publicly Owned Treatment Works (Form R - Part II - Section 6.1)	Total Other Transfers (Form R - Part II - Section 6.2)	Quantity Released EPCRA* (Form R - Part II - Section 8.1)	Quantity Onsite Energy Recovery (Form R - Part II - Section 8.2)	Quantity Offsite Energy Recovery (Form R - Part II - Section 8.3)	Quantity Recycled Onsite (Form R - Part II - Section 8.4)	Quantity Recycled Offsite (Form R - Part II - Section 8.5)	Quantity Treated Onsite (Form R - Part II - Section 8.6)	Quantity Treated Offsite (Form R - Part II - Section 8.7)	Quantity Released Non Production** (Form R - Part II - Section 8.8)
Year 1	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####
Year 2	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####
Year 3	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####

Chemical B

	On-Site Chemical Releases (lbs)					Off-Site Transfers (lbs)		Source Reduction, Recycling and Waste Management Activities (lbs)							
	Fugitive or Non-Point Air Emissions (Form R - Part II - Section 5.1)	Stack or Point Air Emissions (Form R - Part II - Section 5.2)	Discharges to Receiving Streams or Water Bodies (Form R - Part II - Section 5.3)	On-Site Underground Injection (Form R - Part II - Section 5.4)	On-Site Land Disposal (Form R - Part II - Section 5.5)	Total Transfers to Publicly Owned Treatment Works (Form R - Part II - Section 6.1)	Total Other Transfers (Form R - Part II - Section 6.2)	Quantity Released EPCRA* (Form R - Part II - Section 8.1)	Quantity Onsite Energy Recovery (Form R - Part II - Section 8.2)	Quantity Offsite Energy Recovery (Form R - Part II - Section 8.3)	Quantity Recycled Onsite (Form R - Part II - Section 8.4)	Quantity Recycled Offsite (Form R - Part II - Section 8.5)	Quantity Treated Onsite (Form R - Part II - Section 8.6)	Quantity Treated Offsite (Form R - Part II - Section 8.7)	Quantity Released Non Production** (Form R - Part II - Section 8.8)
Year 1	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####
Year 2	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####
Year 3	####	####	####	####	####	####	####	####	####	####	####	####	####	####	####

* Total production related releases (does not include any quantities treated on or off-site)

** Total releases to the environment as a result of remedial actions, catastrophic events, or one time events not asssociated with production.

Central Internet Database — *Detail Report (MIN-1)*

Data Category: Materials in Inventory (MIN)

STATE: Washington **OPERATIONS OFFICE:** Richland **SITE:** Hanford

MIN Category 1

Material Name	Material Form	Inventory Amount w/ Units	Radiologically Contaminated	Facility Name	Headquarters Program(s)
Min Material 1	XXXX	####	XXXX	XXXX	XXXX
Min Material 2	XXXX	####	XXXX	XXXX	XXXX
Min Material 3	XXXX	####	XXXX	XXXX	XXXX

MIN Category 2

Material Name	Material Form	Inventory Amount w/ Units	Radiologically Contaminated	Facility Name	Headquarters Program(s)
Min Material 1	XXXX	####	XXXX	XXXX	XXXX
Min Material 2	XXXX	####	XXXX	XXXX	XXXX
Min Material 3	XXXX	####	XXXX	XXXX	XXXX

NOTE: All MIN data is from fiscal year 1996.

Data Category: Materials in Inventory (MIN)

MIN Category: Category 1, Category 2

MIN Category 1

	Material ID	Material Form	Inventory Amount w/ Units	Radiologically Contaminated	Facility Name	Headquarters Program(s)
Site A	Min Material 1	XXXX	####	XXXX	XXXX	XXXX
	Min Material 2	XXXX	####	XXXX	XXXX	XXXX
	Min Material 3	XXXX	####	XXXX	XXXX	XXXX
Site B	Min Material 1	XXXX	####	XXXX	XXXX	XXXX
	Min Material 2	XXXX	####	XXXX	XXXX	XXXX
	Min Material 3	XXXX	####	XXXX	XXXX	XXXX

MIN Category 2

	Material ID	Material Form	Inventory Amount w/ Units	Radiologically Contaminated	Facility Name	Headquarters Program(s)
Site A	Min Material 4	XXXX	####	XXXX	XXXX	XXXX
	Min Material 5	XXXX	####	XXXX	XXXX	XXXX
	Min Material 6	XXXX	####	XXXX	XXXX	XXXX
Site B	Min Material 4	XXXX	####	XXXX	XXXX	XXXX
	Min Material 5	XXXX	####	XXXX	XXXX	XXXX
	Min Material 6	XXXX	####	XXXX	XXXX	XXXX

NOTE: All MIN data is from fiscal year 1996.

Central Internet Database — *Annual Stream Quantity Detail (SNF-1)*

Data Category: Spent Nuclear Fuel

STATE: Washington **OPERATIONS OFFICE:** Richland **PROGRAM:** Office of Environmental Management
SITE: Hanford

Hanford - SNF - Stream 1 **Stream Code:** 1234

Source Site: Site A **Activity:** XXXXX **TSD System:** XXXXX
Destination Site: Site B **Activity:** XXXXX **TSD System:** XXXXX

Quantities by Year (MTHM)

Year	Generation Quantity	Disposition Quantity	Inventory Quantity	Year	Generation Quantity	Disposition Quantity	Inventory Quantity	Year	Generation Quantity	Disposition Quantity	Inventory Quantity
1997 (A)*	####	####	####	2007 (P)*	####	####	####	2041-45 (P)*	####	####	####
1998 (A)*	####	####	####	2008 (P)*	####	####	####	2046-50 (P)*	####	####	####
1999 (P)*	####	####	####	2009 (P)*	####	####	####	2051-55 (P)*	####	####	####
2000 (P)*	####	####	####	2010 (P)*	####	####	####	2056-60 (P)*	####	####	####
2001 (P)*	####	####	####	2011-15 (P)*	####	####	####	2061-65 (P)*	####	####	####
2002 (P)*	####	####	####	2016-20 (P)*	####	####	####	2066-70 (P)*	####	####	####
2003 (P)*	####	####	####	2021-25 (P)*	####	####	####	Non-Annualized	####	####	####
2004 (P)*	####	####	####	2026-30 (P)*	####	####	####				
2005 (P)*	####	####	####	2031-35 (P)*	####	####	####	Totals (FY 99+)	####	####	
2006 (P)*	####	####	####	2036-40 (P)*	####	####	####				

Hanford - SNF - Stream 2 **Stream Code:** 5678

Source Site: Site A **Activity:** XXXXX **TSD System:** XXXXX
Destination Site: Site B **Activity:** XXXXX **TSD System:** XXXXX

Quantities by Year (MTHM)

Year	Generation Quantity	Disposition Quantity	Inventory Quantity	Year	Generation Quantity	Disposition Quantity	Inventory Quantity	Year	Generation Quantity	Disposition Quantity	Inventory Quantity
1997 (A)*	####	####	####	2007 (P)*	####	####	####	2041-45 (P)*	####	####	####
1998 (A)*	####	####	####	2008 (P)*	####	####	####	2046-50 (P)*	####	####	####
1999 (P)*	####	####	####	2009 (P)*	####	####	####	2051-55 (P)*	####	####	####
2000 (P)*	####	####	####	2010 (P)*	####	####	####	2056-60 (P)*	####	####	####
2001 (P)*	####	####	####	2011-15 (P)*	####	####	####	2061-65 (P)*	####	####	####
2002 (P)*	####	####	####	2016-20 (P)*	####	####	####	2066-70 (P)*	####	####	####
2003 (P)*	####	####	####	2021-25 (P)*	####	####	####	Non-Annualized	####	####	####
2004 (P)*	####	####	####	2026-30 (P)*	####	####	####				
2005 (P)*	####	####	####	2031-35 (P)*	####	####	####	Totals (FY 99+)	####	####	
2006 (P)*	####	####	####	2036-40 (P)*	####	####	####				

(A)* = Actual Volumes

(P)* = Projected Volumes

Central Internet Database — *Management Activity Quantities by Site (SNF-2)*
Data Category: Spent Nuclear Fuel

STATE: California **OPERATIONS OFFICE:** Oakland Operations Office **PROGRAM:** Office of Environmental Management
YEAR RANGE: 1999 - 2001

Site	SNF Amount to Be Managed (MTHM)				Final Disposition Activity (MTHM)			
	Starting Inventory	On Site Generation	Off-Site Receipts	Total	On-Site Treatment	Ship to Other DOE Site for Management/Storage	Ship for Disposal	Total
Site 1	#####	#####	#####	#####	#####	#####	#####	#####
Site 2	#####	#####	#####	#####	#####	#####	#####	#####
Site 3	#####	#####	#####	#####	#####	#####	#####	#####
Site 4	#####	#####	#####	#####	#####	#####	#####	#####
TOTAL	**#####**	**#####**	**#####**	**#####**	**#####**	**#####**	**#####**	**#####**

STATE: Idaho **OPERATIONS OFFICE:** Idaho Operations Office **PROGRAM:** Office of Environmental Management
YEAR RANGE: 1999 - 2001

Site	SNF Amount to Be Managed (MTHM)				Final Disposition Activity (MTHM)			
	Starting Inventory	On Site Generation	Off-Site Receipts	Total	On-Site Treatment	Ship to Other DOE Site for Management/Storage	Ship for Disposal	Total
Site 1	#####	#####	#####	#####	#####	#####	#####	#####
Site 2	#####	#####	#####	#####	#####	#####	#####	#####
TOTAL	**#####**	**#####**	**#####**	**#####**	**#####**	**#####**	**#####**	**#####**

Central Internet Database

Management Activity Quantities by Date Range (SNF-3)

Data Category: Spent Nuclear Fuel

STATE: Washington
PROGRAM: Office of Environmental Management
SITE: Hanford
OPERATIONS OFFICE: Richland
YEAR RANGE: 1998 - 2000

Site	SNF Amount to Be Managed (MTHM)				Final Disposition Activity (MTHM)			
	Starting Inventory	On Site Generation	Off-Site Receipts	Total	On-Site Treatment	Ship to Other DOE Site for Management/Storage	Ship for Disposal	Total
1998 (A*)	#####	#####	#####	#####	#####	#####	#####	#####
1999 (P)*	#####	#####	#####	#####	#####	#####	#####	#####
2000 (P)*	#####	#####	#####	#####	#####	#####	#####	#####
TOTAL	**#####**	**#####**	**#####**	**#####**	**#####**	**#####**	**#####**	**#####**

Central Internet Database

Shipping and Receiving Summary (SNF-4)

Data Category: Spent Nuclear Fuel

YEAR RANGE: 1999-2000

PROGRAM: Office of Environmental Management

Receiving Sites Quantity (MTHM)

Shipping Site \ Receiving Site	INEEL	Other DOE Sites	Shipping Total
Site 1	####	####	######
Site 2	####	####	######
Site 3	####	####	######
Site 4	####	####	######
Site 5	####	####	######
Total	#####	####	######

* For the 1999 data, the "Other DOE Sites" column includes some SNF that will be sent to the Geologic Repository Disposition Site in New Mexico.

Central Internet Database

Data Category: Spent Nuclear Fuel

Annual Shipping & Receiving Quantities (SNF-5)

RECEIVING SITE: Hanford **PROGRAM:** Office of Environmental Management

Shipping Site	Quantiy (MTHM) by Year													
	1998 (A)*	1999 (P)*	2000 (P)*	2001 (P)*	2002 (P)*	2003 (P)*	2004 (P)*	2005 (P)*	2006 (P)*	2007 (P)*	2008 (P)*	2009 (P)*	2010 (P)*	2011-70(P)* & Non-Annualized
Site A	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####
Site B	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####
Site C	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####
Site D	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####
Total	######	######	######	######	######	######	######	######	######	######	######	######	######	######

RECEIVING SITE: Other DOE Sites **PROGRAM:** Office of Environmental Management

Shipping Site	Quantiy (MTHM) by Year													
	1998 (A)*	1999 (P)*	2000 (P)*	2001 (P)*	2002 (P)*	2003 (P)*	2004 (P)*	2005 (P)*	2006 (P)*	2007 (P)*	2008 (P)*	2009 (P)*	2010 (P)*	2011-70(P)* & Non-Annualized
Site A	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####
Site B	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####
Site C	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####
Site D	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####
Total	######	######	######	######	######	######	######	######	######	######	######	######	######	######

(A)* = Actual Volume

(P)* = Projected Volumes

Central Internet Database

Annual Projections for Shipping & Receiving (SNF-7)

Data Category: Spent Nuclear Fuel

RECEIVING SITE: Hanford

STATE: Washington

Stream Name										
Shipping Site - Site A	Year	Quantity Shipped (MTHM)	Year	Quantity Shipped (MTHM)	Year	Quantity Shipped (MTHM)	Year	Quantity Shipped (MTHM)	Year	Quantity Shipped (MTHM)
	1998 (A)	#####	2003(P)	#####	2008(P)	#####	2021-25(P)	#####	2046-50(P)	#####
	1999 (P)	#####	2004(P)	#####	2009(P)	#####	2026-30(P)	#####	2051-55(P)	#####
	2000 (P)	#####	2005(P)	#####	2010(P)	#####	2031-35(P)	#####	2056-60(P)	#####
	2001 (P)	#####	2006(P)	#####	2011-15(P)	#####	2036-40(P)	#####	2061-65(P)	#####
	2002 (P)	#####	2007(P)	#####	2016-20(P)	#####	2041-45(P)	#####	2065-70(P)	#####
									Non-Annualized	#####

Stream Name										
Shipping Site - Site A	Year	Quantity Shipped (MTHM)	Year	Quantity Shipped (MTHM)	Year	Quantity Shipped (MTHM)	Year	Quantity Shipped (MTHM)	Year	Quantity Shipped (MTHM)
	1998 (A)	#####	2003(P)	#####	2008(P)	#####	2021-25(P)	#####	2046-50(P)	#####
	1999 (P)	#####	2004(P)	#####	2009(P)	#####	2026-30(P)	#####	2051-55(P)	#####
	2000 (P)	#####	2005(P)	#####	2010(P)	#####	2031-35(P)	#####	2056-60(P)	#####
	2001 (P)	#####	2006(P)	#####	2011-15(P)	#####	2036-40(P)	#####	2061-65(P)	#####
	2002 (P)	#####	2007(P)	#####	2016-20(P)	#####	2041-45(P)	#####	2065-70(P)	#####
									Non-Annualized	#####

(A) =Actual
(P) = Projected

Data Category: Spent Nuclear Fuel

Source Reactor Location: Country, State, City

Reactor A

SNF Stream Name	Managing DOE Site	DOE Generating Program	Total Curies for Stream	Planned Disposition Site	Total Current Year Inventory Quantity (MTHM)	% Quantity from Source Reactor	Quantity from Source Reactor (MTHM)
Stream 1	XXXXXXX	####	####	XXXXXXX	####	XX%	####
Stream 2	XXXXXXX	####	####	XXXXXXX	####	XX%	####
Stream 3	XXXXXXX	####	####	XXXXXXX	####	XX%	####

Reactor B

SNF Stream Name	Managing DOE Site	DOE Generating Program	Total Curies for Stream	Planned Disposition Site	Total Current Year Inventory Quantity (MTHM)	% Quantity from Source Reactor	Quantity from Source Reactor (MTHM)
Stream 4	XXXXXXX	####	####	XXXXXXX	####	XX%	####
Stream 5	XXXXXXX	####	####	XXXXXXX	####	XX%	####
Stream 6	XXXXXXX	####	####	XXXXXXX	####	XX%	####

Data Category: Spent Nuclear Fuel

State: Washington **Site:** Hanford

Facility A

SNF Stream Name	Reporting Site	Total Curies for Stream	Total Current Year Inventory Quantity (MTHM)	Source Reactor(s)	% Quantity from Source Reactor	SNF Stream Fuel Types
Stream 1	XXXXXXX	####	####	Reactor 1	XX	Fuel Type A
				Reactor 2	XX	Fuel Type B
						Fuel Type C
Stream 2	XXXXXXX	####	####	Reactor 1	XX	Fuel Type D
						Fuel Type E
						Fuel Type F
Stream 3	XXXXXXX	####	####	Reactor 3	XX	Fuel Type A
						Fuel Type B

Facility B

SNF Stream Name	Reporting Site	Total Curies for Stream	Total Current Year Inventory Quantity (MTHM)	Source Reactor(s)	% Quantity from Source Reactor	SNF Stream Fuel Types
Stream 4	XXXXXXX	####	####	Reactor 5	XX	Fuel Type A
						Fuel Type B
						Fuel Type C
Stream 5	XXXXXXX	####	####	Reactor 5	XX	Fuel Type D
				Reactor 6	XX	Fuel Type E
						Fuel Type F
Stream 6	XXXXXXX	####	####	Reactor 3	XX	Fuel Type A
						Fuel Type B

Central Internet Database — *Stream Characteristics Detail (SNF-10)*
Data Category: Spent Nuclear Fuel

STATE: Washington
SITE: Hanford
PROGRAM: Office of Environmental Management
OPERATIONS OFFICE: Richland Operations Office

Hanford - SNF - Stream 1 — **Stream Code:** 1234

Stream Fuel Types
Type A
Type B
Type C

Storage Facility	% of Stream Quantity
Facility A	25
Facility B	50
Facility C	25

Source Reactor	% of Stream Quantity
Reactor 1	25
Reactor 2	50
Reactor 3	25

ISOTOPE AND CONTAMINANT PROFILES

% of Stream	**Total Curies:** XXXXXX			
100	**All Streams**			
	Isotopes			
	Isotope 1	Avg.Concentration:XXX	Low Limit Concentration: XXX	Upper Limit Concentration: XXX
	Isotope 2	Avg. Concentration: XXX	Low Limit Concentration: XXX	Upper Limit Concentration: XXX
	Isotope 3	Avg. Concentration: XXX	Low Limit Concentration: XXX	Upper Limit Concentration: XXX

CURRENT YEAR: 1998

	HIGH LEVEL WASTE (m^3)				TRANSURANIC WASTE (m^3)				MIXED LOW LEVEL WASTE (m^3)			
Generating Program	DP	SC	NE	EM	DP	SC	NE	EM	DP	SC	NE	EM
Site												
Site A	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####
Site B	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####
Site C	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####
Site D	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####
TOTAL	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####

	LOW LEVEL WASTE (m^3)				OTHER (m^3)*				SPENT NUCLEAR FUEL(MTHM)**			
Generating Program	DP	SC	NE	EM	DP	SC	NE	EM	DP	SC	NE	EM
Site												
Site A	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####
Site B	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####
Site C	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####
Site D	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####
TOTAL	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####

*Other includes "Unspecified" and 11(e)2 waste types.

**Spent Nuclear Volumes are in Metric Tons of Heavy Metal

Quantity Generated (m^3)														
Waste Type	1998 (A*)	1999 (P*)	2000 (P*)	2001(P*)	2002(P*)	2003(P*)	2004(P*)	2005(P*)	2006(P*)	2007(P*)	2008(P*)	2009(P*)	2010(P*)	Total
HLW	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####
TRU	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####
MLLW	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####
LLW	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####
OTHER*	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####
SNF**	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####

(A*) = Actual
(P*) = Projected

*Other includes "Unspecified" and 11(e)2 waste types.
** SNF amounts are reported in metric tons of heavy metal (MTHM)

Current Year: 1998

	HLW		HLW-Vitrified		TRU		MLLW		LLW		Other**		Spent Nuclear Fuel	
Site	Volume (m3)	Curies	Volume *(Canisters)	Curies	Volume (m^3)	Curies	Volume (m^3)	Curies	Volume (m^3)	Curies	Volume (m^3)	Curies	Volume (MTHM)***	Curies
Site A	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####
Site B	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####
Site C	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####
Site D	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####
TOTAL	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####

* Vitrified HLW quantities are reported in # of HLW Canisters

**Other includes "Unspecified" and 11(e)2 waste types.

***SNF amounts are reported in metric tons of heavy metal (MTHM)

Current Year: 1998

	HLW		HLW-Vitrified		TRU		MLLW		LLW		Other**		Spent Nuclear Fuel	
Program	Volume (m3)	Curies	Volume *(Canisters)	Curies	Volume (m^3)	Curies	Volume (m^3)	Curies	Volume (m^3)	Curies	Volume (m^3)	Curies	Volume (MTHM)***	Curies
DP	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####
EM	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####
SC	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####
NE	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####
TOTAL	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####

* Vitrified HLW quantities are reported in # of HLW Canisters

**Other includes "Unspecified" and 11(e)2 waste types.

***SNF amounts are reported in metric tons of heavy metal (MTHM)

Current Year: 1998

Waste Type	In Situ Managed Quantity (m^3)	Treatment Quantity (m^3)	Disposal Quantity (m^3)	Other Processing Quantity (m^3)	Total (m^3)
HLW	#####	#####	#####	#####	#####
HLW - Vit*	#####	#####	#####	#####	#####
TRU	#####	#####	#####	#####	#####
MLLW	#####	#####	#####	#####	#####
LLW	#####	#####	#####	#####	#####
OTHER**	#####	#####	#####	#####	#####

	On Site Treatment (MTHM)	Ship to Other DOE Sites for Management/Storage	Ship for Final Disposal (MTHM)	Total(MTHM)
SNF***	#####	#####	#####	#####

* Vitrified HLW quantities are reported in # of HLW Canisters

**Other includes "Unspecified" and 11(e)2 waste types.

***SNF amounts are reported in metric tons of heavy metal (MTHM)

Current Year: 1998

Receiving Site **Hanford**		TRU		MLLW		LLW		OTHER*		SNF**	
		Quantity (m^3)	Curies	Quantity (m^3)	Curies	Quantity (m^3)	Curies	Quantity (m^3)	Curies	Quantity (MTHM)	Curies
Ship Sites	Site A	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####
	Site B	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####
	Site C	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####
	Site D	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####

Receiving Site **INEEL**		TRU		MLLW		LLW		OTHER*		SNF**	
		Quantity (m^3)	Curies	Quantity (m^3)	Curies	Quantity (m^3)	Curies	Quantity (m^3)	Curies	Quantity (MTHM)	Curies
Ship Sites	Site A	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####
	Site B	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####
	Site C	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####
	Site D	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####

*Other includes "Unspecified" and 11(e)2 waste types.

**SNF amounts are reported in metric tons of heavy metal (MTHM)

Waste Type	1998 (A*)	1999 (P*)	2000 (P*)	2001(P*)	2002(P*)	2003(P*)	2004(P*)	2005(P*)	2006(P*)	2007(P*)	2008(P*)	2009(P*)	2010(P*)	Total
HLW	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####
HLW-Vit*	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####
TRU	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####
MLLW	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####
LLW	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####
OTHER**	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####
SNF***	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####

*(A) = Actual
(P) = Projected
* HLW-Vitrified quantities are reported in # of HLW Canisters
**Other includes "Unspecified" and 11(e)2 waste types.
***SNF amounts are reported in metric tons of heavy metal (MTHM)

Hanford Site - 1998 Actuals

Contaminated Facilities Information

Facility Status	Reported Number of Facilities
Operating	####
Operational Standby	####
Shutdown Pending Transfer	####
Shutdown Pending D&D	####
D&D in Progress	####
No Information Provided	####
TOTAL	####

Facility Contaminant Type	Reported Number of Facilities
Radioactive	####
Chemical	####
Radioactive & Chemical	####
None	####
No Information Provided	####
TOTAL	####

Type of Nuclear Material/ Waste Present in Facility	Reported Number of Facilities
HLW	####
LLW	####
MLLW	####
MTRU	####
TRU	####
Source Material	####
SNF	####
Unirradiated Nuclear Fuel	####
Other	####

Radioactive Waste Summary

Waste Type	Starting Inventory (m^3)	Reporting Period Additions (m^3)			Reporting Period Disposition Quantity (m^3)*			Ending Inventory (m^3)*
		New	Process Outputs	Receipts	Treatment	Disposal	Other	
HLW	####	####	####	####	####	####	####	####
HLW-Vitrified*	####	####	####	####	####	####	####	####
TRU	####	####	####	####	####	####	####	####
MLLW	####	####	####	####	####	####	####	####
LLW	####	####	####	####	####	####	####	####
Other**	####	####	####	####	####	####	####	####

* HLW - Vitrified is reported in "# of HLW canisters"

** Other includes 11e2 waste and unspecified waste types

Hanford Site - 1998 Actuals

Spent Nuclear Fuel Summary

Material	SNF Amount to be Managed (MTHM)				SNF Final Disposition(MTHM)			
	Starting Inventory (MTHM)	On Site Generation	Off-Site Receipts	Total	On Site Treatment	Ship to Other DOE Site for Management/Storage	Ship for Disposal	Total
Spent Nuclear Fuel	####	####	####	####	####	####	####	####

* Spent Nuclear Fuel quantities are reported in Metric Tons of Heavy Metal (MTHM)

Ex-Situ Contaminated Media Summary

Waste Type	Starting Inventory (m^3)*	Reporting Period Additions (m^3)*	Reporting Period Dispositions (m^3)			Ending Inventory (m^3)
			Treatment	Disposal	Other	
TRU	####	####	####	####	####	####
MLLW	####	####	####	####	####	####
LLW	####	####	####	####	####	####
Other*	####	####	####	####	####	####

* Other includes 11e2 waste and unspecified waste types

In-Situ Contaminated Media Information (Represents Life Cycle Data - In Situ Media Quantities are not reported by year)

Waste Type	Management Strategy				Total Volume (m^3)
	In-Situ Treatment (m^3)	In-Situ Containment (m3)	Access/Institutional Controls (m3)	No Action (m3)	
LLW	###	###	###	###	###
MLLW	###	###	###	###	###
TRU	###	###	###	###	###
Other*	###	###	###	###	###
Total	###	###	###	###	###

* Other includes 11e2 and unspecified waste types.

Hanford Site - 1998 (Actuals)

Non-Radioactive Hazardous Waste Information

Classification	Waste Type	Volume (m^3)
Hazardous	Non Routine RCRA	###
	Routine RCRA	###
	Non Routine State	###
	Routine State	###
	Non Routine TSCA	###
	Routine TSCA	###
Sanitary	Non Routine	###
	Routine	###
Total		###

Materials in Inventory (1996 Information Only)

Name	Category	Material Volume
Material A	Category 1	###
Material B	Category 2	###
Material C	Category 3	###

Toxic Release Inventory Data (Most current available data is for 1997 reporting year)

Chemical Name	On Site Releases (lbs)	Off-SiteTransfers (lbs)	Source Reduction, Recycling and Waste Management (lbs)
Chemical 1	###	###	###
Chemical 2	###	###	###
Chemical 3	###	###	###
Chemical 4	###	###	###
Chemical 5	###	###	###
TOTAL	###	###	###

Buried TRU

Type of Emplacement	Total Volume Actual Waste Emplaced (m^3)	Total Volume Containers Emplaced (m^3)	Total Volume Contaminated Soil (m^3)
Emplacement 1	###	###	###
Emplacement 2	###	###	###
Emplacement 3	###	###	###
Emplacement 4	###	###	###
Emplacement 5	###	###	###

EM Program - 1998 (Actuals)

Contaminated Facilities Information

Facility Status	Reported Number of Facilities
Operating	####
Operational Standby	####
Shutdown Pending Transfer	####
Shutdown Pending D&D	####
D&D in Progress	####
No Information Provided	####
TOTAL	####

Facility Contaminant Type	Number of Facilities
Radioactive	####
Chemical	####
Radioactive & Chemical	####
None	####
No Information Provided	####
TOTAL	####

Radioactive Waste Summary

Waste Type	Starting Inventory	Reporting Period Generation Quantity			Reporting Period Disposition Quantity			Ending Inventory (m^3)
		New (m^3)	Process Outputs (m^3)	Receipts (m^3)	Treatment Vol (m^3)	Disposal Vol (m^3)	Other Processing (m^3)	
HLW	####	####	####	####	####	####	####	####
HLW-Vitrified*	####	####	####	####	####	####	####	####
MLLW	####	####	####	####	####	####	####	####
TRU	####	####	####	####	####	####	####	####
LLW	####	####	####	####	####	####	####	####
Other**	####	####	####	####	####	####	####	####

*****HLW-Vitrified Streams are reported in units of "Number of HLW Canisters"

** Other waste type includes 11e2 waste and unspecified waste type

Spent Nuclear Fuel Summary

Material	SNF Amount to be Managed (MTHM)				SNF Final Disposition(MTHM)			
	Starting Inventory (MTHM)	On Site Generation	Off-Site Receipts	Total	On Site Treatment	Ship to Other DOE Site for Management/Storage	Ship for Disposal	Total
Spent Nuclear Fuel	####	####	####	####	####	####	####	####

* Spent Nuclear Fuel quantities are reported in Metric Tons of Heavy Metal (MTHM)

EM Program - 1998 (Actuals)

Ex-Situ Contaminated Media Information

Waste Type	Starting Inventory	Reporting Period Generation Quantity			Reporting Period Disposition Quantity			Ending Inventory (m^3)
		New (m^3)	Process Outputs (m^3)	Receipts (m^3)	Treatment Vol (m^3)	Disposal Vol (m^3)	Other Processing (m^3)	
MLLW	####	####	####	####	####	####	####	####
TRU	####	####	####	####	####	####	####	####
LLW	####	####	####	####	####	####	####	####
Other*	####	####	####	####	####	####	####	####

* Other waste type includes 11e2 waste and unspecified waste type

In-Situ Contaminated Media Information (Represents Life Cycle Data - In Situ Media Quantities are not reported by year)

Waste Type	Management Strategy				Total Volume (m^3)
	In-Situ Treatment (m^3)	In-Situ Containment (m^3)	Access/ Institutional Controls (m^3)	No Action (m^3)	
LLW	###	###	###	###	###
MLLW	###	###	###	###	###
TRU	###	###	###	###	###
Other*	###	###	###	###	###
TOTAL	###	###	###	###	###

*Other waste type includes 11e2 waste and unspecified waste type

**** The CID does not capture data by program from all of the source systems. The information displayed in this report includes all data that can be reported by program.**

Washington - 1998 (Actuals)

Contaminated Facilities Information

Facility Contaminant Type	Reported Number of Facilities
Radioactive	####
Chemical	####
Radioactive & Chemical	####
None	####
No Information Provided	####
TOTAL	####

Facility Contaminant Type	Reported Number of Facilities
Radioactive	####
Chemical	####
Radioactive & Chemical	####
None	####
No Information Provided	####
TOTAL	####

Type of Nuclear Material/ Waste Present in Facility	Reported Number of Facilities
HLW	####
LLW	####
MLLW	####
MTRU	####
TRU	
Source Material	####
SNF	####
Unirradiated Nuclear Fuel	####
Other	####

Waste Transfer Information - Radioactive Waste and Spent Nuclear Fuel

Waste Type	Shipped to Out of State Sites (m^3)	Generated (m^3)	In-State Disposition (m^3)	Intrastate Shipments (m^3)	Received from Out of State Sites (m^3)
HLW	####	####	####	####	####
HLW-Vitrified*	####	####	####	####	####
MLLW	####	####	####	####	####
LLW	####	####	####	####	####
TRU	####	####	####	####	####
Other**	####	####	####	####	####
SNF***	####	####	####	####	####

*****HLW-Vitrified is reported in units of "Number of HLW Canisters

** Other includes 11e2 and unspecified waste types

*******SNF is reported in units of Metric Tons of Heavy Metal (MTHM)

Waste Transfer Information - Ex-Situ Contaminated Media

Waste Type	Shipped to Out of State Sites (m^3)	Generated (m^3)	In-State Disposition (m^3)	Intrastate Shipments (m^3)	Received from Out of State Sites (m^3)
MLLW	####	####	####	####	####
TRU	####	####	####	####	####
LLW	####	####	####	####	####
Other*	####	####	####	####	####

* Other includes 11e2 and unspecified waste types

Washington - 1998 (Actuals)

In-Situ Contaminated Media Information (Represe

Waste Type	Management Strategy				Total Volume (m^3)
	In-Situ Treatment (m^3)	In-Situ Containment (m^3)	Access/ Institutional Controls (m^3)	No Action (m^3)	
LLW	###	###	###	###	###
MLLW	###	###	###	###	###
TRU	###	###	###	###	###
Other*	###	###	###	###	###
TOTAL	###	###	###	###	###

* Other includes 11e2 and unspecified waste types

Toxic Release Inventory Data (Most current available data is for 1997 reporting year)

Chemical Name	On Site Releases (lbs)	Off-SiteTransfers (lbs)	Source Reduction, Recycling and Waste Management (lbs)
Chemical 1	###	###	###
Chemical 2	###	###	###
Chemical 3	###	###	###
Chemical 4	###	###	###
Chemical 5	###	###	###
TOTAL	###	###	###

Non-Radioactive Waste Information

Classification	Waste Type	Quantity (m^3)
Hazardous	**Management Strategy**	###
	Routine RCRA	###
	Non Routine State	###
	Routine State	###
	Non Routine TSCA	###
	Routine TSCA	###
Sanitary	Non Routine	###
	Routine	###
TOTAL		###

Material in Inventory (1996 Information Only)

Total Volume (m^3)	Material Volume
Category 1	###
Category 2	###
Category 3	###
Category 4	###
Category 5	###
Category 6	###
TOTAL	####

Washington - 1998 (Actuals)

Buried TRU Information

Type of Placement	Anticipated Response								
	No Action (m3)	Access/ Institutional Controls (m3)		In-Situ Containment (m3)	In-Situ Treatment (m3)	Collection and Treatment (m3)	Collection and Storage (m3)	Collection and Disposal (m3)	Total (m3)
Trench/Pit Burial Volume (m^3)	##	##		##	##	##	##	##	##
Greater Confinement Disposal (GDC) Volume (m^3)	##	##		##	##	##	##	##	##
Underground Injection Volume (m^3)	##	##		##	##	##	##	##	##
Spill or Surface Discharge Volume (m^3)	##	##		##	##	##	##	##	##
Surface Testing (m3)	##	##		##	##	##	##	##	##
Underground Testing (m3)	##	##		##	##	##	##	##	##
Other Volume (m^3)	##	##		##	##	##	##	##	##

Reporting Period - 1998

Contaminated Facilities Information

Contaminant Type	Number of Facilities per Operations Office												
	Albuquerque	Carlsbad	Chicago	HQ	Idaho	Nevada	Oakland	Oak Ridge	Ohio	Richland	Rocky Flats	Savannah River	Other*
Radioactive Contamination	###	###	###	###	###	###	###	###	###	###	###	###	###
Chemical Contamination	###	###	###	###	###	###	###	###	###	###	###	###	###
Radioactive and Chemical Contamination	###	###	###	###	###	###	###	###	###	###	###	###	###
No Contamination	###	###	###	###	###	###	###	###	###	###	###	###	###
No Information Provided	###	###	###	###	###	###	###	###	###	###	###	###	###
TOTAL	###	###	###	###	###	###	###	###	###	###	###	###	###

Reporting Period - 1998

Radioactive Waste and Spent Nuclear Fuel Information

Waste Type	Quantity (m^3) per Operations Office												
	Albuquerque	Carlsbad	Chicago	HQ	Idaho	Nevada	Oakland	Oak Ridge	Ohio	Richland	Rocky Flats	Savannah River	Total
LLW													
Quantity Generated	###	###	###	###	###	###	###	###	###	###	###	###	###
Quantity Treated	###	###	###	###	###	###	###	###	###	###	###	###	###
Quantity Disposed	###	###	###	###	###	###	###	###	###	###	###	###	###
Other Processing Quantity*	###	###	###	###	###	###	###	###	###	###	###	###	###
MLLW													
Quantity Generated	###	###	###	###	###	###	###	###	###	###	###	###	###
Quantity Treated	###	###	###	###	###	###	###	###	###	###	###	###	###
Quantity Disposed	###	###	###	###	###	###	###	###	###	###	###	###	###
Other Processing Quantity*	###	###	###	###	###	###	###	###	###	###	###	###	###
HLW													
Quantity Generated	###	###	###	###	###	###	###	###	###	###	###	###	###
Quantity Treated	###	###	###	###	###	###	###	###	###	###	###	###	###
Quantity Disposed	###	###	###	###	###	###	###	###	###	###	###	###	###
Other Processing Quantity*	###	###	###	###	###	###	###	###	###	###	###	###	###
HLW-Vitrified**													
Quantity Generated	###	###	###	###	###	###	###	###	###	###	###	###	###
Quantity Treated	###	###	###	###	###	###	###	###	###	###	###	###	###
Quantity Disposed	###	###	###	###	###	###	###	###	###	###	###	###	###
Other Processing Quantity*	###	###	###	###	###	###	###	###	###	###	###	###	###
TRU													
Quantity Generated	###	###	###	###	###	###	###	###	###	###	###	###	###
Quantity Treated	###	###	###	###	###	###	###	###	###	###	###	###	###
Quantity Disposed	###	###	###	###	###	###	###	###	###	###	###	###	###
Other Processing Quantity*	###	###	###	###	###	###	###	###	###	###	###	###	###
Other***													
Quantity Generated	###	###	###	###	###	###	###	###	###	###	###	###	###
Quantity Treated	###	###	###	###	###	###	###	###	###	###	###	###	###
Quantity Disposed	###	###	###	###	###	###	###	###	###	###	###	###	###
Other Processing Quantity*	###	###	###	###	###	###	###	###	###	###	###	###	###

* Other Processing Quantity includes radioactive waste that was recycled, returned to remediation unit, NPDES discharge, or other non-specified treatment processes

** Vitrified HLW Quantities are presented in units of "Number of HLW Canisters"

*** Other includes 11e2 waste and waste designated as "unspecified" waste type.

Reporting Period - 1998

Spent Nuclear Fuel*	Final Dispositions Per Operations Office (MTHM)*												
	Albuquerque	Carlsbad	Chicago	HQ	Idaho	Nevada	Oakland	Oak Ridge	Ohio	Richland	Rocky Flats	Savannah River	Total
On Site Generation	###	###	###	###	###	###	###	###	###	###	###	###	###
On Site Treatment**	###	###	###	###	###	###	###	###	###	###	###	###	###
Ship to Other DOE Site For Management or Storage	###	###	###	###	###	###	###	###	###	###	###	###	###
Ship for Disposal	###	###	###	###	###	###	###	###	###	###	###	###	###

* Spent Nuclear Fuel quantities are reported in Metric Tons of Heavy Metal (MTHM)

* These quantities include final treatment steps only - no interim treatment quantities are included

Ex-Situ Contaminated Media Information

Waste Type	Quantity (m^3) per Operations Office												
	Albuquerque	Carlsbad	Chicago	HQ	Idaho	Nevada	Oakland	Oak Ridge	Ohio	Richland	Rocky Flats	Savannah River	Total
LLW													
Quantity Generated	###	###	###	###	###	###	###	###	###	###	###	###	###
Quantity Treated	###	###	###	###	###	###	###	###	###	###	###	###	###
Quantity Disposed	###	###	###	###	###	###	###	###	###	###	###	###	###
Other Processing Quantity*	###	###	###	###	###	###	###	###	###	###	###	###	###
MLLW													
Quantity Generated	###	###	###	###	###	###	###	###	###	###	###	###	###
Quantity Treated	###	###	###	###	###	###	###	###	###	###	###	###	###
Quantity Disposed	###	###	###	###	###	###	###	###	###	###	###	###	###
Other Processing Quantity*	###	###	###	###	###	###	###	###	###	###	###	###	###
TRU													
Quantity Generated	###	###	###	###	###	###	###	###	###	###	###	###	###
Quantity Treated	###	###	###	###	###	###	###	###	###	###	###	###	###
Quantity Disposed	###	###	###	###	###	###	###	###	###	###	###	###	###
Other Processing Quantity*	###	###	###	###	###	###	###	###	###	###	###	###	###
Other**													
Quantity Generated	###	###	###	###	###	###	###	###	###	###	###	###	###
Quantity Treated	###	###	###	###	###	###	###	###	###	###	###	###	###
Quantity Disposed	###	###	###	###	###	###	###	###	###	###	###	###	###
Other Processing Quantity*	###	###	###	###	###	###	###	###	###	###	###	###	###

* Other Processing Quantity includes radioactive waste that was recycled, returned to remediation unit, NPDES discharge, or other non-specified treatment processes

** Other includes 11e2 waste and waste designated as "unspecified" waste type

Toxic Chemical Releases

Category	Selected Year TRI Reporting Data (lbs) per Operations Office											
	Albuquerque	Carlsbad	Chicago	HQ	Idaho	Nevada	Oakland	Oak Ridge	Ohio	Richland	Rocky Flats	Savannah River
On Site Releases	###	###	###	###	###	###	###	###	###	###	###	###
Off-Site Transfers	###	###	###	###	###	###	###	###	###	###	###	###
Source Reduction, Recycling, and Waste Management	###	###	###	###	###	###	###	###	###	###	###	###
Total Transfers to Publicly Owned Treatment Works	###	###	###	###	###	###	###	###	###	###	###	###
TOTAL												

Non-Radioactive Hazardous Waste Information

Category		Selected Year Volume (m^3) per Ops Office												Total
		Albuquerque	Carlsbad	Chicago	HQ	Idaho	Nevada	Oakland	Oak Ridge	Ohio	Richland	Rocky Flats	Savannah River	
Routine	RCRA	###	###	###	###	###	###	###	###	###	###	###	###	###
	TSCA	###	###	###	###	###	###	###	###	###	###	###	###	###
	State	###	###	###	###	###	###	###	###	###	###	###	###	###
	Sanitary	###	###	###	###	###	###	###	###	###	###	###	###	###
	TOTAL	###	###	###	###	###	###	###	###	###	###	###	###	###
Non-Routine	RCRA	###	###	###	###	###	###	###	###	###	###	###	###	###
	TSCA	###	###	###	###	###	###	###	###	###	###	###	###	###
	State	###	###	###	###	###	###	###	###	###	###	###	###	###
	Sanitary	###	###	###	###	###	###	###	###	###	###	###	###	###
	TOTAL	###	###	###	###	###	###	###	###	###	###	###	###	###

Buried TRU Information

Type of Placement	Anticipated Response							
	No Action (m3)	Access/ Institutional Controls (m3)	In-Situ Containment (m3)	In-Situ Treatment (m3)	Collection and Treatment (m3)	Collection and Storage (m3)	Collection and Disposal (m3)	Total (m3)
Trench/Pit Burial Volume (m^3)	##	##	##	##	##	##	##	##
Greater Confine-ment Disposal (GDC) Volume (m^3)	##	##	##	##	##	##	##	##
Underground Injection Volume (m^3)	##	##	##	##	##	##	##	##
Spill or Surface Discharge Volume (m^3)	##	##	##	##	##	##	##	##
Surface Testing (m3)	##	##	##	##	##	##	##	##
Underground Testing (m3)	##	##	##	##	##	##	##	##
Other Volume (m^3)	##	##	##	##	##	##	##	##

WASTE TYPE:					CURRENT YEAR:								
Site	Starting Inventory (m^3)*	Addition Quantity (m^3)*			Treatment Quantity (m3)			Disposal Quantity (m3)			TBD Dispositions (m^3)	Other (m^3)**	Ending Inventory (m^3)
		New	Process Outputs	Receipts	On-Site	Off-Site	TBD-Site	On-Site	Off-Site	TBD-Site			
Site 1	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####
Site 2	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####
Site 3	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####
Site 4	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####
TOTAL	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####

* For Vitrified HLW, quantities are shown in "Number of HLW Canisters."

** Other includes NPDES discharge, recycle, other processing, return to remediation unit, and on-site placement.

SNF				CURRENT YEAR:				
Site	SNF Amount to be Managed (MTHM)***				SNF Disposition Activity (MTHM)***			
	Starting Inventory	On-Site Generation	Off-Site Receipts	Total	On-Site Treatment	Ship to Other DOE Site for Management / Storage	Ship for Final Disposition	Total
Site 1	#####	#####	#####	######	#####	#####	#####	#####
Site 2	#####	#####	#####	#####	#####	#####	#####	#####
Site 3	#####	#####	#####	#####	#####	#####	#####	#####
Site 4	#####	#####	#####	#####	#####	#####	#####	#####
Total	#####	#####	#####	#####	#####	#####	#####	#####

*** SNF amounts are reported in metric tons of heavy metal (MTHM)